

SECRET
ONCART

OXC-10741-66
Copy 6 of 9

11 July 1966

MEMORANDUM FOR : Director of Materiel, OSA

SUBJECT : TACAN Installation in Aircraft 124

Reference : (A) D/M Memo OXC-10649-66 dated 23 June 66.

(B) [REDACTED]

(C) ECP 22-22

(D) ECP 22-22-1

(E) ECP 22-75 *- file*

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1. Reference (A) requested that an agenda item for the next scheduled Configuration Control Board meeting consider the installation of TACAN in the A-12 trainer, aircraft 124, in accordance with the request of reference (B). Reference (C) which included the installation of TACAN in aircraft 124 was approved by Headquarters. Subsequently reference (D) was submitted and approved providing for the transfer of aircraft 124 to reference (E) for later installation. However, the overall approval given to reference (C) was not affected.

2. It is recommended that, contingent upon the availability of a TACAN system, authority for installation in aircraft 124 be granted as requested in reference (B).

SIGNED

JOHN PARANGOSKY
D/TECH/OSA

25X1A

D/TECH/OSA/[REDACTED] sp (11 July 66)

Cy 1 - MB/OSA	2 - D/OSA
3 - D/FA/OSA	4 - OXC/OSA
5 - PG/OSA	6 - CD/OSA
7 - SCD/OSA	8 - chrono
9 - MB/OSA	

ONCART

LOCKHEED-CALIFORNIA COMPANY

ENGINEERING STUDY ☐CHANGE PROPOSAL ☒

LAC 22-31-1

DATE

14 JANUARY 1966

AFFECTS:

WSPO ☐PROJECT ☒

NAME OF MAJOR COMPONENT

SR-3

PART OR LOWEST SUBASSEMBLY

PART NO. & MODEL OR TYPE

TITLE OF PROPOSAL:

INSTALL IMPROVED GYRO REFERENCE HEADING SYSTEM

NATURE OF PROPOSAL: This ECP covers the development and manufacture of kits required to install the SR-3 Reference System in all A-12 ships except S/N 124. The SR-3 System will replace the MA-1 and MD-1 Reference System. Flight Testing of the SR-3 System will be accomplished on Contract JET-250.

REASON FOR PROPOSAL: MA-1 and MD-1 Reference Heading System is used as a back-up for the INS. This system has a total drift rate of approximately four (4) degrees per hour. The SR-3 system has a total drift rate of one (1) degree per hour. In addition, the SR-3 system is lighter and occupies less space.

Use of the SR-3 system should provide the program with a highly reliable method of carrying out a mission if the INS fails during the flight.

Reason for Revision: To submit Proposed Target Price. This price reflects the transfer of ship 124 to ECP 22-74.

This ECP was approved by Headquarters Message 2401, dated 19 August 1964.

ES

ESTIMATED COST AND TIME INVOLVED:

ADDITIONAL FUNDING REQUIRED:

CP

ESTIMATED COST FOR KITS OR PARTS:

(See Page 2.)

ADDITIONAL FUNDING REQUIRED:

ITEMS AFFECTED BY PROPOSAL:

SAFETY	MISSION EFFECT- TIVENESS	PERFORM- ANCE	OPERATING PROCEDURE	INTER- CHANGE- ABILITY	WEIGHT OR WEIGHT & BALANCE	TOOLS & SUPPORT EQUIPMENT	MAINTE- NANCE PROCEDURE	SERVICE LIFE	FLIGHT MANUAL	MAINTE- NANCE MANUAL
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

EST. MAN/HRS. REQ'D. TO ACCOMPLISH CHANGE IN FIELD

SOURCE OF PARTS FOR KIT ADP will furnish under Service Bulletins 726,735 and 940

AVAILABILITY _____ WEEKS AFTER APPROVAL

DISPOSITION OF SPARES AFFECTED

MA-1 AND MD-1 COMPONENTS WOULD BE SENT TO THE DEPOT. ILLEGIB

INITIATED BY:

APPROVED:

Approved For Release 2001/06/09 : CIA-RDP69B00279R000100110001-2

STATINTL

Approved For Release 2001/06/09 : CIA-RDP69B00279R000100110001-2

Approved For Release 2001/06/09 : CIA-RDP69B00279R000100110001-2

Approved For Release 2001/06/09 : CIA-RDP69B00279R000100110001-2										
LOCKHEED-CALIFORNIA COMPANY	ENGINEERING STUDY <input type="checkbox"/> CHANGE PROPOSAL <input checked="" type="checkbox"/>									
LAC 22-45-1										
DATE 14 JANUARY 1966	AFFECTS: WSP0 <input type="checkbox"/> PROJECT <input checked="" type="checkbox"/>									
NAME OF MAJOR COMPONENT IFF	PART OR LOWEST SUBASSEMBLY PART NO. & MODEL OR TYPE 914-X-1									
TITLE OF PROPOSAL: REPLACE APX-46 IFF WITH WILCOX 914X-1 AND ASSOCIATED CONTROL UNIT										
<p>NATURE OF PROPOSAL: This ECP covers the design, development and manufacture of kits required to replace the APX-46 IFF with the Wilcox 914X-1 IFF, in A-12 Articles 122, 125-128, 130 and 132. Also included is the associated control units for all A-12 Aircraft.</p> <p>ECP 22-68 will provide Wilcox IFF for aircraft 134 and 135 and ECP 22-76 for serials 124, 129 and 131.</p>										
<p>REASON FOR PROPOSAL: The retrofit of the ADP AIC in A-12 Articles requires the use of space currently occupied by the APX-46. The customized Wilcox IFF will replace the APX-46. It is smaller, lighter and technically superior to the APX-46. The new control panel incorporates all the necessary operating functions in a single unit. All codes can be set during preflight checkout and an emergency bar is provided so that FAA Emergency Code is generated by actuating a switch. We have demonstrated our Engineering Model to the pilots and they have expressed their satisfaction.</p> <p>Reason for Revision: To submit Proposed Target Price. This price reflects the break-out of the five (5) aircraft, (Ref. ECP 22-68 and 22-76), noted above and increased equipment costs.</p> <p>This ECP was approved by Headquarters Message 2341, dated 10 February 1965.</p>										
ES	ESTIMATED COST AND TIME INVOLVED : ADDITIONAL FUNDING REQUIRED : N/A									
CP	ESTIMATED COST FOR KITS OR PARTS : ADDITIONAL FUNDING REQUIRED : (See Page 2.)									
ITEMS AFFECTED BY PROPOSAL :										
SAFETY	MISSION EFFECT- TIVENESS	PERFORM- ANCE	OPERATING PROCEDURE	INTER- CHANGE- ABILITY	WEIGHT OR WEIGHT & BALANCE	TOOLS & SUPPORT EQUIPMENT	MAINTENANCE PROCEDURE	SERVICE LIFE	FLIGHT MANUAL	MAINTENANCE MANUAL
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
EST. MAN/HRS. REQ'D. TO ACCOMPLISH CHANGE IN FIELD										
SOURCE OF PARTS FOR KIT ADP will furnish under Service Bulletins 734, 750, 770, 778, 829 and 843.						AVAILABILITY _____ WEEKS AFTER APPROVAL				
DISPOSITION OF SPARES AFFECTED										
APX-46 units will be returned to the Depot for disposition.										
INITIATED BY :						APPROVED : [REDACTED]				
ADP						PROJECT				
Approved For Release 2001/06/09 : CIA-RDP69B00279R000100110001-2										

Amend 9
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STATINTL

Approved For Release 2001/06/09 : CIA-RDP69B00279R000100110001-2

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Approved For Release 2001/06/09 : CIA-RDP69B00279R000100110001-2 LOCKHEED-CALIFORNIA COMPANY		ENGINEERING STUDY <input type="checkbox"/> CHANGE PROPOSAL <input checked="" type="checkbox"/>		10001-2 LAC 22-35-1						
DATE 14 JANUARY 1966		AFFECTS: WSPO <input type="checkbox"/> PROJECT <input checked="" type="checkbox"/>								
NAME OF MAJOR COMPONENT		PART OR LOWEST SUBASSEMBLY		PART NO. & MODEL OR TYPE						
TITLE OF PROPOSAL : ALL ATTITUDE FUEL QUANTITY SYSTEM										
NATURE OF PROPOSAL: This ECP covers (1) design and development of new probes for all fuel tanks. (2) design and tooling for changes required to the vehicles as result of the new probes. (3) fabrication, assembly and procurement of all parts necessary to install the new probes. The new probes will be incorporated in A-12 Serials 121, 122, 124-132, 134 and 135.										
Reason for Revision: To submit Proposed Target Price.										
This ECP was approved by Headquarters Message 2341, dated 10 February 1965.										
REASON FOR PROPOSAL The present fuel quantity was designed to be light, simple and as reliable as possible. This resulted in a single capacitance probe in each tank which is accurate for the design cruise condition (i.e., 7½ degrees nose up). We have received complaints from the pilots about the accuracy of the system during non-design cruise conditions, especially during letdown. During letdown the fuel quantity is low, the nose is down and the aircraft is decelerating. Under these conditions the probes can be completely uncovered, resulting in a zero quantity reading while several thousand pounds may remain. To correct these conditions it is proposed that two probes be installed in each tank. The resultant fuel quantity system will be accurate over a range of 15 degrees nose up to 15 degrees nose down. These probes will have the same overall capacitance as the present probes so the present selector switch, fuel additive compensator and cabling need not be changed.										
ES		ESTIMATED COST AND TIME INVOLVED : N/A ADDITIONAL FUNDING REQUIRED :								
CP		ESTIMATED COST FOR KITS OR PARTS : (See Page 2.) ADDITIONAL FUNDING REQUIRED :								
ITEMS AFFECTED BY PROPOSAL :										
SAFETY <input type="checkbox"/>	MISSION EFFECT- TIVENESS <input type="checkbox"/>	PERFORM- ANCE <input type="checkbox"/>	OPERATING PROCEDURE <input type="checkbox"/>	INTER- CHANGE- ABILITY <input type="checkbox"/>	WEIGHT OR WEIGHT & BALANCE <input type="checkbox"/>	TOOLS & SUPPORT EQUIPMENT <input type="checkbox"/>	MAINTENANCE PROCEDURE <input type="checkbox"/>	SERVICE LIFE <input type="checkbox"/>	FLIGHT MANUAL <input type="checkbox"/>	MAINTENANCE MANUAL <input type="checkbox"/>
EST. MAN/HRS. REQ'D. TO ACCOMPLISH CHANGE IN FIELD										
SOURCE OF PARTS FOR KIT ADP will furnish under Service Bulletins 826, 844 and 922.				AVAILABILITY _____ WEEKS AFTER APPROVAL						
DISPOSITION OF SPARES AFFECTED Existing probes removed from Articles will be sent to the Depot.										
INITIATED BY : ADP				APPROVED : [REDACTED] PROJECT						

STATINTL

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2	1	11	"
3	DFR	12	RR
4	OXC	13	
5	MD	14	
6	CD	15	
7	SD	16	

DIRECTOR

25X1A

ROUTINE

IN 68344

TOR: 2135Z 22 JAN 65

05A-1-15

25X1A TO INFO CITE 25X1A

ATTENTION: JOHN PARANGOSKY FROM C. L. JOHNSON

SUBJECT: ALL ATTITUDE FUEL QUANTITY SYSTEM

1. THE FUEL QUANTITY SYSTEM ON THE OXCART AND KEDLOCK AIRPLANES HAS BEEN DESIGNED TO BE AS LIGHT, SIMPLE AND RELIABLE AS POSSIBLE. AT THE TIME THIS DESIGN WAS MADE THE PROBES, COAX PLUGS AND THE COAX CABLES WERE NEW HIGH TEMPERATURE DEVELOPMENTS. THUS THE NUMBER OF PROBES AND PLUGS WAS PURPOSELY KEPT TO A MINIMUM.

2. THE PRESENT FUEL QUANTITY SYSTEM ON THE OXCART AIRPLANE HAS ONE PROBE PER TANK WHICH IS COMPLETELY ACCURATE ONLY AT 7-1/2 DEGREE NOSE UP. ACCURACY OF THIS SYSTEM VARIES PROPORTIONATELY AS ATTITUDE VARIES FROM THE 7-1/2 DEGREE OPTIMUM.

3. WE HAVE HAD NUMEROUS COMPLAINTS FROM THE PILOTS ABOUT THE INACCURACY OF THIS SYSTEM AT OTHER ATTITUDES, PARTICULARLY DURING LET DOWNS AND DECELERATIONS.

4. IT IS RECOMMENDED THAT WE INSTALL TWO PROBES IN ALL TANKS. HEAD VOLUME DATA AND PROBE LOCATIONS

SECRET

GROUP 1
EXCLUDED FROM AUTO-
MATIC DOWNGRADING
AND DECLASSIFICATION

25X1A

[REDACTED] (IN 68344)

S E C R E T

PAGE TWO

HAVE BEEN GIVEN TO M-H ON ALL TANKS ALTHOUGH THEY HAVE NOT BEEN GIVEN A GO-AHEAD FOR PROBES ON ANY TANK EXCEPT 4.

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5. THE TWO PROBE PER TANK, ALL ATTITUDE SYSTEM INSTALLED IN THE [REDACTED] AIRPLANE HAS PROVEN STABLE IN PITCH, ROLL AND YAW MANEUVERS IN FLIGHT TESTS TO DATE.

6. WE WOULD LIKE TO GO AHEAD ON ECP 22-35 PREVIOUSLY SUBMITTED TO YOU IN ORDER TO PROVIDE THIS ALL ATTITUDE SYSTEM FOR ALL AIRPLANES. WE WILL MAKE THE PROBES MATCH THE PRESENT FUEL TANK OR THE ADDITIONAL FUEL CONFIGURATION AS REQUIRED.

END OF MESSAGE

S E C R E T

LOCKHEED-CALIFORNIA COMPANY		ENGINEERING STUDY <input type="checkbox"/>		LAC 22-36-1							
		CHANGE PROPOSAL <input checked="" type="checkbox"/>									
DATE 14 JANUARY 1966		AFFECTS: WSPO <input checked="" type="checkbox"/>		PROJECT <input checked="" type="checkbox"/>							
NAME OF MAJOR COMPONENT		PART OR LOWEST SUBASSEMBLY		PART NO. & MODEL OR TYPE							
TITLE OF PROPOSAL : AIRPLANE CONTROL SYSTEM CHECKOUT CART											
<p>NATURE OF PROPOSAL: Design, develop and manufacture four carts to aid in the complete checkout of the airplane control system. Three of these carts will be stationed at [REDACTED] for use on the A-12 Articles and the other cart will be stationed at EAFB for use on the AF-12's.</p> <p>STATINTL</p> <p>STATINTL</p>											
<p>REASON FOR PROPOSAL: The Contractor has thus far used various pieces of his own instrumentation and equipment to check out problems. This equipment has thus far been hand carried to [REDACTED] of need each time a problem has arisen. This ECP will provide the program with new checkout equipment in a suitable form and sufficient quantity.</p> <p>Supplying a cart for each airplane location will greatly reduce the amount of time used for the operational checkout of all servos and hydraulic actuators used in the control system. The addition of this piece of equipment should greatly enhance the efficiency of pre-flight and post-flight trouble shooting.</p> <p>This ECP was approved by Headquarters Message 2341, dated, 10 February 1965.</p> <p>Reason for Revision: To submit Proposed Target Price. This price reflects increased developmental costs.</p>											
ES	ESTIMATED COST AND TIME INVOLVED : N/A										
CP	ESTIMATED COST FOR KITS OR PARTS : (See Page 2.)										
ITEMS AFFECTED BY PROPOSAL :											
SAFETY	MISSION EFFECTIVENESS	PERFORMANCE	OPERATING PROCEDURE	INTER-CHANGEABILITY	WEIGHT OR WEIGHT & BALANCE	TOOLS & SUPPORT EQUIPMENT	MAINTENANCE PROCEDURE	SERVICE LIFE	FLIGHT MANUAL	MAINTENANCE MANUAL	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
EST. MAN/HRS. REQ'D. TO ACCOMPLISH CHANGE IN FIELD						AVAILABILITY _____ WEEKS AFTER APPROVAL					
SOURCE OF PARTS FOR KIT NOT APPLICABLE											
DISPOSITION OF SPARES AFFECTED NOT APPLICABLE						ILLEGIB					
INITIATED BY : ADP - [REDACTED]						APPROVED : [REDACTED]					

STATINTL

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LOCKHEED-CALIFORNIA COMPANY		ENGINEERING STUDY <input type="checkbox"/>		LAC 22-58-1							
		CHANGE PROPOSAL <input checked="" type="checkbox"/>									
DATE 14 JANUARY 1966		AFFECTS: WSPO <input checked="" type="checkbox"/>		PROJECT <input checked="" type="checkbox"/>							
NAME OF MAJOR COMPONENT OIL PRESSURE TRANSMITTER		PART OR LOWEST SUBASSEMBLY		PART NO. & MODEL OR TYPE							
TITLE OF PROPOSAL : ENGINE OIL PRESSURE TRANSMITTER DESIGN IMPROVEMENT TESTING											
<p>NATURE OF PROPOSAL: This ECP covers the prototype development of an improved Engine Oil Pressure Transmitter through September 1965. Further testing of the prototype units will continue beyond this time and this effort is being accomplished under Contract WM-66 Category II.</p>											
<p>REASON FOR PROPOSAL: To improve the service life of the Engine Oil Pressure Transmitter. Reference letter Kelly to John, dated 27 October 1964 and ADP Message 4667 dated 1 October 1965.</p> <p>Reason for Revision: To submit Proposed Target Price. This price reflects the cost of Phase I prototype testing and the deletion of Phase II, Production Incorporation.</p> <p>Phase I of ECP 22-58 was approved by Headquarters Message 2341, dated 10 February 1965.</p>											
ES	ESTIMATED COST AND TIME INVOLVED : N/A										
	ADDITIONAL FUNDING REQUIRED :										
CP	ESTIMATED COST FOR KITS OR PARTS : (See Page 2.)										
	ADDITIONAL FUNDING REQUIRED :										
ITEMS AFFECTED BY PROPOSAL :											
SAFETY	MISSION EFFEC- TIVENESS	PERFORM- ANCE	OPERATING PROCEDURE	INTER- CHANGE- ABILITY	WEIGHT OR WEIGHT & BALANCE	TOOLS & SUPPORT EQUIPMENT	MAINTE- NANCE PROCEDURE	SERVICE LIFE	FLIGHT MANUAL	MAINTE- NANCE MANUAL	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
EST. MAN/HR. REQ'D. TO ACCOMPLISH CHANGE IN FIELD											
SOURCE OF PARTS FOR KIT N/A						AVAILABILITY _____ WEEKS AFTER APPROVAL					
DISPOSITION OF SPARES AFFECTED N/A											
INITIATED BY : ADP						APPROVED : WSPO Approved For Release 2001/06/09 : CIA-RDP69B00279R000100110001-2					

STATINTL

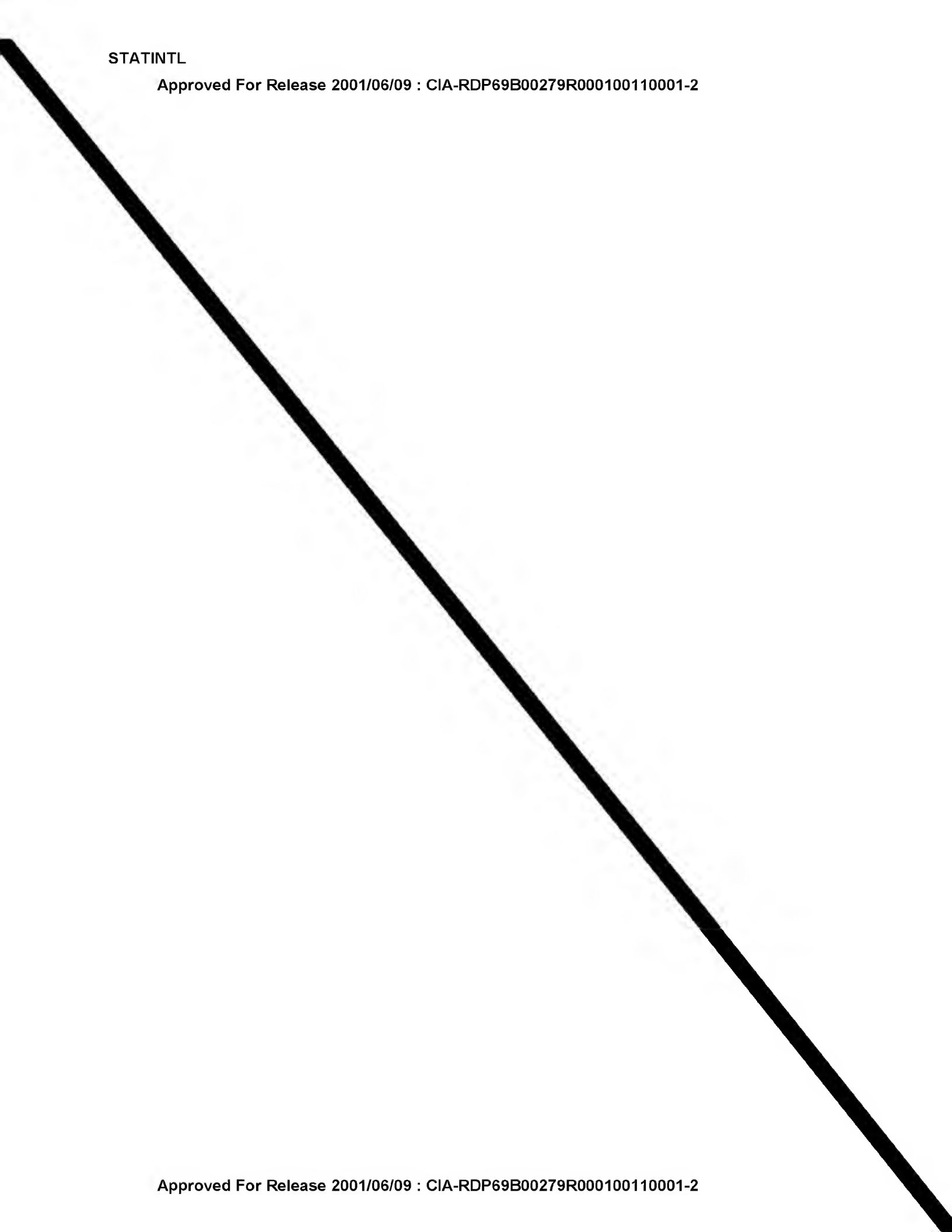
Approved For Release 2001/06/09 : CIA-RDP69B00279R000100110001-2

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LOCKHEED-CALIFORNIA COMPANY		ENGINEERING STUDY <input type="checkbox"/>		LAC 22-76	
		CHANGE PROPOSAL <input checked="" type="checkbox"/>			
DATE 20 APRIL 1966		AFFECTS: WSPO <input type="checkbox"/>		PROJECT <input checked="" type="checkbox"/>	
NAME OF MAJOR COMPONENT WILCOX IFF		PART OR LOWEST SUBASSEMBLY		PART NO. & MODEL OR TYPE	
TITLE OF PROPOSAL : REPLACE APX-46 IFF WITH 914X-1 IFF IN S/N'S 124, 129 and 131					
NATURE OF PROPOSAL: This ECP covers the manufacture of kits required to replace the APX-46 IFF with the Wilcox IFF in A-12 Articles 124, 129 and 131. The associated control unit was provided under ECP 22-43-1.					
REASON FOR PROPOSAL: This ECP represents a breakout of ships 124, 129 and 131 from ECP 22-43-1 for later installation. ECP 22-43 originally included these aircraft and was approved per Headquarters Message 2341, dated 10 February 1965.					
A Proposed Target Price is also established for this ECP.					
ES	ESTIMATED COST AND TIME INVOLVED : ADDITIONAL FUNDING REQUIRED : N/A				
CP	ESTIMATED COST FOR KITS OR PARTS : ADDITIONAL FUNDING REQUIRED : (See Page 2.)				
ITEMS AFFECTED BY PROPOSAL :					
SAFETY <input type="checkbox"/>	MISSION EFFECTIVENESS <input type="checkbox"/>	PERFORMANCE <input type="checkbox"/>	OPERATING PROCEDURE <input type="checkbox"/>	INTER- CHANGE ABILITY <input type="checkbox"/>	WEIGHT OR WEIGHT & BALANCE <input type="checkbox"/>
EST. MAN/HRS. REQ'D. TO ACCOMPLISH CHANGE IN FIELD					
SOURCE OF PARTS FOR KIT			AVAILABILITY _____ WEEKS AFTER APPROVAL		
SERVICE BULLETIN TO BE WRITTEN					
DISPOSITION OF SPARES AFFECTED APX-46 UNITS WILL BE RETURNED TO THE DEPOT FOR DISPOSITION.					
INITIATED BY :			APPROVED : [REDACTED]		
Approved For Release 2001/06/09 : CIA-RDP69B00279R00010001-2			ILLEGIB		

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LOCKHEED-CALIFORNIA COMPANY		ENGINEERING STUDY <input type="checkbox"/>		LAC 22-75	
		CHANGE PROPOSAL <input checked="" type="checkbox"/>			
DATE 14 APRIL 1966		AFFECTS: WSPO <input type="checkbox"/>		PROJECT <input checked="" type="checkbox"/>	
NAME OF MAJOR COMPONENT		PART OR LOWEST SUBASSEMBLY		PART NO. & MODEL OR TYPE	
TITLE OF PROPOSAL : TACAN FOR S/N 124					
NATURE OF PROPOSAL: This ECP covers the manufacture of a kit required to incorporate TACAN in A-12 Article 124. TACAN will replace the ARC-15F Receiver and B-18A Converter. In addition the Glide Slope Marker Receiver installation will be removed. Extensive modification of the "E"-bay cockpit and chine areas is required.					
REASON FOR PROPOSAL : This ECP represents a breakout of ship 124 from ECP 22-22-1 for later installation. ECP 22-22 originally included ship 124 and was approved per Headquarters Message 798, dated 20 July 1964.					
A Proposed Target Price is also established for this ECP.					
ES	ESTIMATED COST AND TIME INVOLVED : ADDITIONAL FUNDING REQUIRED : N/A				
CP	ESTIMATED COST FOR KITS OR PARTS : (See Page 2.) ADDITIONAL FUNDING REQUIRED :				
ITEMS AFFECTED BY PROPOSAL :					
SAFETY <input type="checkbox"/>	MISSION EFFECTIVENESS <input type="checkbox"/>	PERFORMANCE <input type="checkbox"/>	OPERATING PROCEDURE <input type="checkbox"/>	INTER- CHANGE- ABILITY <input type="checkbox"/>	WEIGHT OR WEIGHT & BALANCE <input type="checkbox"/>
TOOLS & SUPPORT EQUIPMENT <input type="checkbox"/>	MAINTENANCE PROCEDURE <input type="checkbox"/>	SERVICE LIFE <input type="checkbox"/>	FLIGHT MANUAL <input type="checkbox"/>	MAINTENANCE MANUAL <input type="checkbox"/>	
EST. MAN/HRS. REQ'D. TO ACCOMPLISH CHANGE IN FIELD					
SOURCE OF PARTS FOR KIT			AVAILABILITY _____ WEEKS AFTER APPROVAL		
SERVICE BULLETIN TO BE WRITTEN					
DISPOSITION OF SPARES AFFECTED					
EQUIPMENT REMOVED FROM THE AIRCRAFT WILL BE RETURNED TO THE DEPOT.					
INITIATED BY : Approved For Release 2001/06/09 : CIA-RDP69B00279R000100110001-2 ADP			APPROVED : [REDACTED] PROJECT		

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Approved For Release 2001/06/09 : CIA-RDP69B00279R000100110001-2

Approved For Release 2001/06/09 : CIA-RDP69B00279R000100110001-2

LOCKHEED-CALIFORNIA COMPANY		ENGINEERING STUDY <input type="checkbox"/>		CHANGE PROPOSAL <input checked="" type="checkbox"/>		LAC 22-74				
DATE 14 APRIL 1966		AFFECTS: WSPO <input type="checkbox"/>		PROJECT <input checked="" type="checkbox"/>						
NAME OF MAJOR COMPONENT		PART OR LOWEST SUBASSEMBLY		PART NO. & MODEL OR TYPE						
TITLE OF PROPOSAL : INSTALL IMPROVED GYRO REFERENCE HEADING SYSTEM IN S/N 124										
NATURE OF PROPOSAL: This ECP covers the manufacture of a kit to incorporate the SR-3 Reference System in A-12 Article 124. The SR-3 System will replace the MA-1 and MD-1 Reference System.										
REASON FOR PROPOSAL : MA-1 and MD-1 Reference Heading System is used as a back-up for the INS. This system has a total drift rate of approximately four (4) degrees per hour. The SR-3 system has a total drift rate of one (1) degree per hour. In addition, the SR-3 system is lighter and occupies less space. Use of the SR-3 system should provide the program with a highly reliable method of carrying out a mission if the INS fails during the flight. This ECP represents a breakout of ship 124 from ECP 22-31-1 for later installation. ECP 22-31 originally included ship 124 and was approved per Headquarters Message 2401, dated 19 August 1964. A Proposed Target Price is also established for this ECP.										
ES	ESTIMATED COST AND TIME INVOLVED : N/A									
	ADDITIONAL FUNDING REQUIRED :									
CP	ESTIMATED COST FOR KITS OR PARTS : (See Page 2.)									
	ADDITIONAL FUNDING REQUIRED :									
ITEMS AFFECTED BY PROPOSAL :										
SAFETY	MISSION EFFEC- TIVENESS	PERFORM- ANCE	OPERATING PROCEDURE	INTER- CHANGE- ABILITY	WEIGHT OR WEIGHT & BALANCE	TOOLS & SUPPORT EQUIPMENT	MAINTENANCE PROCEDURE	SERVICE LIFE	FLIGHT MANUAL	MAINTENANCE MANUAL
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
EST. MAN/HRS. REQ'D. TO ACCOMPLISH CHANGE IN FIELD										
SOURCE OF PARTS FOR KIT					AVAILABILITY _____ WEEKS AFTER APPROVAL					
SERVICE BULLETIN TO BE WRITTEN										
DISPOSITION OF SPARES AFFECTED										
MA-1 AND MD-1 COMPONENTS WILL BE SENT TO THE DEPOT.										
INITIATED BY :					APPROVED : [REDACTED]					
Approved For Release 2001/06/09 : CIA-RDP69B00279R000100110001-2					ADP			ILLEGIB		

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Approved For Release 2001/06/09 : CIA-RDP69B00279R000100110001-2

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LOCKHEED-CALIFORNIA COMPANY		ENGINEERING STUDY <input type="checkbox"/>		LAC 22-72-1							
		CHANGE PROPOSAL <input checked="" type="checkbox"/>									
DATE 14 JANUARY 1966		AFFECTS: WSPO <input checked="" type="checkbox"/>		PROJECT <input type="checkbox"/>							
NAME OF MAJOR COMPONENT		PART OR LOWEST SUBASSEMBLY		PART NO. & MODEL OR TYPE							
TITLE OF PROPOSAL : RETROFIT OF PRODUCTION ADP INLET CONTROL IN ALL YF-12A'S											
NATURE OF PROPOSAL: This ECP covers the manufacture of kits required to incorporate the ADP Inlet Control in all YF-12A aircraft. This installation includes the spike and forward by-pass door position indicating system.											
REASON FOR PROPOSAL : Reason for Revision: To submit Proposed Target Price. This price reflects a reduction in kit costs caused by the deletion equipment such as the Wilcox IFF.											
This ECP was approved by Headquarters Message 8873, dated 27 May 1965.											
ES	ESTIMATED COST AND TIME INVOLVED : N/A										
	ADDITIONAL FUNDING REQUIRED :										
CP	ESTIMATED COST FOR KITS OR PARTS : (See Page 2.)										
	ADDITIONAL FUNDING REQUIRED :										
ITEMS AFFECTED BY PROPOSAL :											
SAFETY	MISSION EFFEC- TIVENESS	PERFORM- ANCE	OPERATING PROCEDURE	INTER- CHANGE- ABILITY	WEIGHT OR WEIGHT & BALANCE	TOOLS & SUPPORT EQUIPMENT	MAINTENANCE PROCEDURE	SERVICE LIFE	FLIGHT MANUAL	MAINTENANCE MANUAL	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
EST. MAN/HRS. REQ'D. TO ACCOMPLISH CHANGE IN FIELD											
SOURCE OF PARTS FOR KIT ADP will furnish under Service Bulletin AF-375.						AVAILABILITY _____ WEEKS AFTER APPROVAL					
DISPOSITION OF SPARES AFFECTED											
INITIATED BY : Approved For Release 2001/06/09 : CIA-RDP69B00279R000100110001-2						APPROVED : WSPO 2 ILLEGIB					

Approved For Release 2001/06/09 : CIA-RDP69B00279R00010010001-2		ENGINEERING STUDY <input type="checkbox"/>	10001-2
LOCKHEED-CALIFORNIA COMPANY		CHANGE PROPOSAL <input checked="" type="checkbox"/>	LAC 22-66-1
DATE 14 JANUARY 1966		AFFECTS: WSPO <input checked="" type="checkbox"/>	PROJECT <input type="checkbox"/>
NAME OF MAJOR COMPONENT	PART OR LOWEST SUBASSEMBLY	PART NO. & MODEL OR TYPE	
TITLE OF PROPOSAL : ALTERNATE STEERING SYSTEM FOR YF-12A'S			
NATURE OF PROPOSAL: This ECP covers the fabrication of kits required to provide an alternate steering system, utilizing the right hand hydraulic system, for all YF-12A aircraft.			
REASON FOR PROPOSAL: Provide the aircraft self steering ability in case of loss of the left hand engine driven hydraulic pumps.			
Reason for Revision: To submit Proposed Target Price.			
This price reflects a reduction in kit costs resulting from the use of Bonded Stock parts.			
This ECP was approved by Headquarters Message 441, dated 6 January 1965.			
ES	ESTIMATED COST AND TIME INVOLVED : N/A		
	ADDITIONAL FUNDING REQUIRED :		
CP	ESTIMATED COST FOR KITS OR PARTS : (See Page 2.)		
	ADDITIONAL FUNDING REQUIRED :		
ITEMS AFFECTED BY PROPOSAL :			
SAFETY <input type="checkbox"/>	MISSION EFFECTIVENESS <input type="checkbox"/>	PERFORMANCE <input type="checkbox"/>	OPERATING PROCEDURE <input type="checkbox"/>
INTER- CHANGE- ABILITY <input type="checkbox"/>	WEIGHT OR WEIGHT & BALANCE <input type="checkbox"/>	TOOLS & SUPPORT EQUIPMENT <input type="checkbox"/>	MAINTENANCE PROCEDURE <input type="checkbox"/>
SERVICE LIFE <input type="checkbox"/>	FLIGHT MANUAL <input type="checkbox"/>	MAINTENANCE MANUAL <input type="checkbox"/>	
EST. MAN/HRS. REQ'D. TO ACCOMPLISH CHANGE IN FIELD			
SOURCE OF PARTS FOR KIT ADP will furnish under Service Bulletin AF-234.		AVAILABILITY _____ WEEKS AFTER APPROVAL	
DISPOSITION OF SPARES AFFECTED N/A			
INITIATED BY :		APPROVED : WSPO <div style="text-align: right;">Amend 9 CT 22</div>	
Approved For Release 2001/06/09 : CIA-RDP69B00279R00010001-2			

STATINTL

Approved For Release 2001/06/09 : CIA-RDP69B00279R000100110001-2

Approved For Release 2001/06/09 : CIA-RDP69B00279R000100110001-2

LOCKHEED-CALIFORNIA COMPANY		ENGINEERING STUDY <input type="checkbox"/>		LAC 22-49-1							
		CHANGE PROPOSAL <input checked="" type="checkbox"/>									
DATE 14 JANUARY 1966		AFFECTS: WSPO <input type="checkbox"/>		PROJECT <input checked="" type="checkbox"/>							
NAME OF MAJOR COMPONENT FUEL TANKS		PART OR LOWEST SUBASSEMBLY		PART NO. & MODEL OR TYPE							
TITLE OF PROPOSAL: FUEL MANAGEMENT REVISION											
<p>NATURE OF PROPOSAL: This ECP covers the engineering design and fabrication of kits required to change the fuel tank sequencing of tanks #3 and #4. Also included are kits necessary to accomplish the transfer of fuel from tank #2 to tank #6 and stop the transfer when 6,000 pounds of fuel remain in tank #2. These changes will be accomplished on all A-12 Articles except #124.</p>											
<p>REASON FOR PROPOSAL: This ECP will result in tank #4 being the last tank in the fuel sequencing. As a result, the C.G. of the article will be moved further aft for a greater portion of the cruise condition. Moving the C.G. aft reduces trim drag, and results in greater range.</p> <p>Reason for Revision: To submit Proposed Firm Price. This price reflects the incremental costs of including the fuel transfer from tank #2 to tank #6.</p> <p>This ECP was approved by Headquarters Message 2341, dated 10 February 1965.</p>											
ES	ESTIMATED COST AND TIME INVOLVED: N/A										
	ADDITIONAL FUNDING REQUIRED:										
CP	ESTIMATED COST FOR KITS OR PARTS: (See Page 2.)										
	ADDITIONAL FUNDING REQUIRED:										
ITEMS AFFECTED BY PROPOSAL:											
SAFETY	MISSION EFFEC- TIVENESS	PERFORM- ANCE	OPERATING PROCEDURE	INTER- CHANGE- ABILITY	WEIGHT OR WEIGHT & BALANCE	TOOLS & SUPPORT EQUIPMENT	MAINTENANCE PROCEDURE	SERVICE LIFE	FLIGHT MANUAL	MAINTENANCE MANUAL	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
EST. MAN/HRS. REQ'D. TO ACCOMPLISH CHANGE IN FIELD											
SOURCE OF PARTS FOR KIT ADP will furnish under Service Bulletins 649,818,819,834, 871,878 and 904.						AVAILABILITY _____ WEEKS AFTER APPROVAL					
DISPOSITION OF SPARES AFFECTED NOTED ON SERVICE BULLETINS						ILLEGIB					
INITIATED BY:						APPROVED: <i>Amund 9 CT 2</i>					
Approved For Release 2001/06/09 : CIA-RDP69B00279R000100110001-2						Approved For Release 2001/06/09 : CIA-RDP69B00279R000100110001-2					

STATINTL

Approved For Release 2001/06/09 : CIA-RDP69B00279R000100110001-2

Approved For Release 2001/06/09 : CIA-RDP69B00279R000100110001-2

Approved For Release 2001/06/09 : CIA-RDP69B00279R000100110001-2										
LOCKHEED-CALIFORNIA COMPANY				ENGINEERING STUDY <input type="checkbox"/>			LAC 22-68-1			
				CHANGE PROPOSAL <input checked="" type="checkbox"/>						
DATE 14 JANUARY 1966				AFFECTS: WSPO <input type="checkbox"/>			PROJECT <input checked="" type="checkbox"/>			
NAME OF MAJOR COMPONENT			PART OR LOWEST SUBASSEMBLY				PART NO. & MODEL OR TYPE			
TITLE OF PROPOSAL : RETROFIT OF PRODUCTION ADP INLET CONTROL IN S/N'S 134 & 135										
NATURE OF PROPOSAL: This ECP covers the design and manufacture of kits required to incorporate the production ADP Inlet Control System and the Wilcox IFF in A-12 Articles 134 and 135. This installation will include a spike and forward by-pass door position indicating system.										
<p>REASON FOR PROPOSAL : Verbal request from Col. Geary to Kelly on 19 March 1965.</p> <p>Reason for Revision: To submit Proposed Target Price. This price reflects a reduction in the engineering effort and the deletion of installation, spares and AGE costs.</p> <p>This ECP was approved by Headquarters Message 8101, dated 18 May 1965.</p>										
ES	ESTIMATED COST AND TIME INVOLVED : N/A									
	ADDITIONAL FUNDING REQUIRED :									
CP	ESTIMATED COST FOR KITS OR PARTS : (See Page 2.)									
	ADDITIONAL FUNDING REQUIRED :									
ITEMS AFFECTED BY PROPOSAL :										
SAFETY <input type="checkbox"/>	MISSION EFFEC- TIVENESS <input type="checkbox"/>	PERFORM- ANCE <input type="checkbox"/>	OPERATING PROCEDURE <input type="checkbox"/>	INTER- CHANGE- ABILITY <input type="checkbox"/>	WEIGHT OR WEIGHT & BALANCE <input type="checkbox"/>	TOOLS & SUPPORT EQUIPMENT <input type="checkbox"/>	MAINTENANCE PROCEDURE <input type="checkbox"/>	SERVICE LIFE <input type="checkbox"/>	FLIGHT MANUAL <input type="checkbox"/>	MAINTENANCE MANUAL <input type="checkbox"/>
EST. MAN/HRS. REQ'D. TO ACCOMPLISH CHANGE IN FIELD										
SOURCE OF PARTS FOR KIT ADP will furnish under Service Bulletins 874,880,884 and 966.						AVAILABILITY _____ WEEKS AFTER APPROVAL				
DISPOSITION OF SPARES AFFECTED										
INITIATED BY :						APPROVED : [REDACTED]				

Approved For Release 2001/06/09 : CIA-RDP69B00279R000100110001-2

Amend 9
C T 22

STATINTL

Approved For Release 2001/06/09 : CIA-RDP69B00279R000100110001-2

Next 1 Page(s) In Document Exempt

Approved For Release 2001/06/09 : CIA-RDP69B00279R000100110001-2

Approved For Release 2001/06/09 : CIA-RDP69B00279R000100110001-2	
LOCKHEED-CALIFORNIA COMPANY	ENGINEERING STUDY <input type="checkbox"/> CHANGE PROPOSAL <input checked="" type="checkbox"/> <div style="float: right; text-align: right;"> LAC 22-57-1 </div>
DATE 14 JANUARY 1966	AFFECTS: WSPO <input checked="" type="checkbox"/> PROJECT <input checked="" type="checkbox"/>
NAME OF MAJOR COMPONENT	PART OR LOWEST SUBASSEMBLY
PART NO. & MODEL OR TYPE	
TITLE OF PROPOSAL : HYDRAULIC REWORK - TEB CAN	
NATURE OF PROPOSAL: This ECP provides kits necessary to re-route outboard elevon hydraulic lines on all A-12 and YF-12A Aircraft. This change is required due to changed location of the TEB CAN by the Engine Contractor.	
REASON FOR PROPOSAL: Interference of hydraulic lines with TEB CAN. Engineering required will be accomplished under Contract FT-21. Installation of kits will be accomplished under Contracts FT-21 and/or SC-23 as applicable. Reason for Revision: To submit Proposed Target Price. This ECP was approved by Headquarters Message 2256, dated 26 July 1965.	
ES	ESTIMATED COST AND TIME INVOLVED : ADDITIONAL FUNDING REQUIRED : N/A
CP	ESTIMATED COST FOR KITS OR PARTS : (See Page 2.) ADDITIONAL FUNDING REQUIRED :
ITEMS AFFECTED BY PROPOSAL :	
SAFETY <input type="checkbox"/>	MISSION EFFEC- TIVENESS <input type="checkbox"/>
PERFORM- ANCE <input type="checkbox"/>	OPERATING PROCEDURE <input type="checkbox"/>
INTER- CHANGE- ABILITY <input type="checkbox"/>	WEIGHT OR WEIGHT & BALANCE <input type="checkbox"/>
TOOLS & SUPPORT EQUIPMENT <input type="checkbox"/>	MAINTENANCE PROCEDURE <input type="checkbox"/>
SERVICE LIFE <input type="checkbox"/>	FLIGHT MANUAL <input type="checkbox"/>
MAINTENANCE MANUAL <input type="checkbox"/>	
EST. MAN/HRS. REQ'D. TO ACCOMPLISH CHANGE IN FIELD	
SOURCE OF PARTS FOR KIT SERVICE BULLETIN 262 - YF-12A SERVICE BULLETIN 673 - A-12	AVAILABILITY _____ WEEKS AFTER APPROVAL
DISPOSITION OF SPARES AFFECTED	
NOT APPLICABLE	
INITIATED BY : ADP Approved For Release 2001/06/09 : CIA-RDP69B00279R000100110001-2	APPROVED : [REDACTED] <div style="text-align: right;"> <i>Amended 9</i> <i>C.T. 2</i> </div>

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Approved For Release 2001/06/09 : CIA-RDP69B00279R000100110001-2

Approved For Release 2001/06/09 : CIA-RDP69B00279R000100110001-2

NATURE OF PROPOSAL:

This ECP covers the activities required to furnish the following systems:

A. JC-130 Command Transmitter Kits

1. Prototype Kit

This includes design, manufacture and installation of one (1) kit in JC-130 E.

2. Kits (9)

Covers manufacture and assembly of nine (9) kits.

3. Furnish ten (10) sets of transmitters, amplifiers, coax switches, cabling, etc.

4. Furnish five (5) sets (approximately 50% Spares) for Item 3 above.

B. Training Hatches

1. Manufacture and deliver ten (10) training hatches.

C. Recovery Parachutes

1. a. Procure fifty (50) training parachute systems (14' airpickup, main and stabilization), and reefing cutters.

b. Procure forty nine (49) 16' airpickup chutes to modify the existing parachute systems.

2. Procure fifty (50) additional pickup.

3. Replacement of expended chutes.

Provide approximately twenty-six (26) additional training parachute systems, (less air pickup chutes), used for rigging tests and training.

4. Limited repair and overhaul of chutes used during training and/or rigging tests.

STATINTL

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Approved For Release 2001/06/09 : CIA-RDP69B00279R000100110001-2	
LOCKHEED-CALIFORNIA COMPANY	ENGINEERING STUDY <input type="checkbox"/> CHANGE PROPOSAL <input checked="" type="checkbox"/> <div style="float: right; text-align: right;"> LAC 22-37-1 </div>
DATE 14 JANUARY 1966	AFFECTS: WSPO <input type="checkbox"/> PROJECT <input checked="" type="checkbox"/>
NAME OF MAJOR COMPONENT	PART OR LOWEST SUBASSEMBLY PART NO. & MODEL OR TYPE
TITLE OF PROPOSAL : WORLD-WIDE CAPABILITY FLIGHT TESTS	
NATURE OF PROPOSAL: This ECP covers the activities necessary to conduct World-Wide Capability flight tests of INS equipment in one (1) C-54 aircraft. Activities include: <ol style="list-style-type: none"> 1. Installation design, liaison and monitor the results of the flight test program; 2. Fabrication and subsequent installation of kit in the C-54 aircraft; 3. Restoration of C-54 to original configuration after completion of testing. 	
[REDACTED] will contract for the conduction of flight test, data reduction and any associated work directly with Headquarters. No [REDACTED] effort is included in this ECP. <div style="text-align: right;">STATINTL</div>	
REASON FOR PROPOSAL: Letter, Kelly to John, same subject, dated 4-29-65. Reason for Revision: To submit Proposed Target Price. This price reflects a reduction in engineering and manufacturing effort. This ECP was approved by Headquarters Message 808, dated 1 July 1965.	
ES	ESTIMATED COST AND TIME INVOLVED : ADDITIONAL FUNDING REQUIRED : N/A
CP	ESTIMATED COST FOR KITS OR PARTS : ADDITIONAL FUNDING REQUIRED : (See Page 2.)
ITEMS AFFECTED BY PROPOSAL :	
SAFETY <input type="checkbox"/>	MISSION EFFEC- TIVENESS <input type="checkbox"/>
PERFORM- ANCE <input type="checkbox"/>	OPERATING PROCEDURE <input type="checkbox"/>
INTER- CHANGE- ABILITY <input type="checkbox"/>	WEIGHT OR WEIGHT & BALANCE <input type="checkbox"/>
TOOLS & SUPPORT EQUIPMENT <input type="checkbox"/>	MAINTENANCE PROCEDURE <input type="checkbox"/>
SERVICE LIFE <input type="checkbox"/>	FLIGHT MANUAL <input type="checkbox"/>
MAINTENANCE MANUAL <input type="checkbox"/>	
EST. MAN/HRS. REQ'D. TO ACCOMPLISH CHANGE IN FIELD	
SOURCE OF PARTS FOR KIT No Kit Required - Flight Test Installation Only.	AVAILABILITY _____ WEEKS AFTER APPROVAL
DISPOSITION OF SPARES AFFECTED	
NOT APPLICABLE	
INITIATED BY : ADP	APPROVED : [REDACTED] <div style="text-align: right;"><i>Adams 9</i> <i>C + 22</i></div>
Approved For Release 2001/06/09 : CIA-RDP69B00279R000100110001-2	

STATINTL

Approved For Release 2001/06/09 : CIA-RDP69B00279R000100110001-2

Approved For Release 2001/06/09 : CIA-RDP69B00279R000100110001-2

Approved For Release 2001/06/09 : CIA-RDP69B00279R000100110001-2	
LOCKHEED-CALIFORNIA COMPANY	ENGINEERING STUDY <input type="checkbox"/> CHANGE PROPOSAL <input checked="" type="checkbox"/>
LAC 22-64-1	
DATE 14 JANUARY 1966	AFFECTS: WSPO <input checked="" type="checkbox"/> PROJECT <input type="checkbox"/>
NAME OF MAJOR COMPONENT	PART OR LOWEST SUBASSEMBLY
PART NO. & MODEL OR TYPE	
TITLE OF PROPOSAL : FUEL QUANTITY MODIFICATION TO FIVE (5) KC-135'S	
NATURE OF PROPOSAL: This ECP provides kits necessary to modify the fuel quantity measuring system for three (3) tanks on five (5) additional KC-135's. The kits will be like those previously supplied under S/R 299.	
REASON FOR PROPOSAL : Reason for Revision: To submit Proposed Target Price. This ECP was approved by Headquarters Message 3861, dated 9 March 1965	
ES	ESTIMATED COST AND TIME INVOLVED : N/A ADDITIONAL FUNDING REQUIRED :
CP	ESTIMATED COST FOR KITS OR PARTS : ADDITIONAL FUNDING REQUIRED : (See Page 2.)
ITEMS AFFECTED BY PROPOSAL :	
SAFETY <input type="checkbox"/>	MISSION EFFEC- TIVENESS <input type="checkbox"/>
PERFORM- ANCE <input type="checkbox"/>	OPERATING PROCEDURE <input type="checkbox"/>
INTER- CHANGE- ABILITY <input type="checkbox"/>	WEIGHT OR WEIGHT & BALANCE <input type="checkbox"/>
TOOLS & SUPPORT EQUIPMENT <input type="checkbox"/>	MAINTENANCE PROCEDURE <input type="checkbox"/>
SERVICE LIFE <input type="checkbox"/>	FLIGHT MANUAL <input type="checkbox"/>
MAINTENANCE MANUAL <input type="checkbox"/>	
EST. MAN/HRS. REQ'D. TO ACCOMPLISH CHANGE IN FIELD	
SOURCE OF PARTS FOR KIT SERVICE BULLETIN 677	AVAILABILITY _____ WEEKS AFTER APPROVAL
DISPOSITION OF SPARES AFFECTED NOT APPLICABLE	
INITIATED BY : SPO	APPROVED : WSPO
Approved For Release 2001/06/09 : CIA-RDP69B00279R000100110001-2	

STATINTL

Approved For Release 2001/06/09 : CIA-RDP69B00279R000100110001-2

Approved For Release 2001/06/09 : CIA-RDP69B00279R000100110001-2

Approved For Release 2001/06/09 : CIA-RDP69B00279R000100110001-2											
LOCKHEED-CALIFORNIA COMPANY				ENGINEERING STUDY <input type="checkbox"/>				LAC 22-73-1			
				CHANGE PROPOSAL <input checked="" type="checkbox"/>							
DATE 14 JANUARY 1966				AFFECTS: WSPO <input checked="" type="checkbox"/>				PROJECT <input type="checkbox"/>			
NAME OF MAJOR COMPONENT				PART OR LOWEST SUBASSEMBLY				PART NO. & MODEL OR TYPE			
TITLE OF PROPOSAL : HYDROGEN IGNITION SYSTEM FOR YF-12A'S											
NATURE OF PROPOSAL: This ECP provides the kits required to install the hydrogen ignition system in the YF-12A aircraft. ADP will furnish only the material and services necessary to make the YF-12A's compatible with the new ignition system. This ECP includes any effort on the ignition system hardware.											
REASON FOR PROPOSAL: Request from SPO, (Ref. letter Ed R. to Rus, dated 5 April 1965). Reason for change: To submit Proposed Target Price. This price reflects a reduction in engineering and manufacturing effort. This ECP was approved by Headquarters Message 8873, dated 27 May 1965.											
ES		ESTIMATED COST AND TIME INVOLVED : N/A									
		ADDITIONAL FUNDING REQUIRED :									
CP		ESTIMATED COST FOR KITS OR PARTS : (See Page 3.)									
		ADDITIONAL FUNDING REQUIRED :									
ITEMS AFFECTED BY PROPOSAL :											
SAFETY <input type="checkbox"/>	MISSION EFFEC- TIVENESS <input type="checkbox"/>	PERFORM- ANCE <input type="checkbox"/>	OPERATING PROCEDURE <input type="checkbox"/>	INTER- CHANGE- ABILITY <input type="checkbox"/>	WEIGHT OR WEIGHT & BALANCE <input type="checkbox"/>	TOOLS & SUPPORT EQUIPMENT <input type="checkbox"/>	MAINTENANCE PROCEDURE <input type="checkbox"/>	SERVICE LIFE <input type="checkbox"/>	FLIGHT MANUAL <input type="checkbox"/>	MAINTENANCE MANUAL <input type="checkbox"/>	
EST. MAN/HRS. REQ'D. TO ACCOMPLISH CHANGE IN FIELD											
SOURCE OF PARTS FOR KIT ADP will furnish under Service Bulletin AF-386.						AVAILABILITY _____ WEEKS AFTER APPROVAL					
DISPOSITION OF SPARES AFFECTED N/A											
INITIATED BY : Approved For Release 2001/06/09 : CIA-RDP69B00279						APPROVED : WSPO ILLEGIB					

IGNITION SYSTEMS

LIST OF MAIN DIFFERENCES

TEB	H ₂
<p>Pyrophoric Ignition</p> <p>Essentially a chemical system with electric current to dump solenoid only. Electric current (1 amp only) required at dump.</p> <p>Remaining TEB may be dumped after touchdown for safety.</p>	<p>Electrical Ignition</p> <p>H₂ gas-D. C. electric system. Requires continuous D. C. current. Requires 3 glow plugs in each engine: Left main engine plug on Essential D. C. bus (This is only plug in each engine that remains on battery if both engines are out) right main engine plug on monitor bus, and afterburner plug on monitor bus.</p> <p>11 amps (D. C.) starting current and 4 1/2 amps (D. C.) steady state current at each glow plug (Total starting amps = 66; total steady amps = 27.)</p> <p>Dump of remaining H₂ not required.</p>

H₂ IGNITION SYSTEM

ADVANTAGES

More ignition firings (20+).
 Less hazardous.
 Uses CIS system except for plug and new wiring.
 Doesn't need special ground support equipment.
 Cheaper.
 Cleaner combustion.
 No tube plugging problem.
 Better air starts.

DISADVANTAGES

Potential electric failure.
 High current load (surge) to initiate system.
 Ability of current equipment to contain H₂ under pressure must be determined. System must be on continually in order to avoid warmup period.
 Dual flameout case may not have sufficient battery capacity for relight if below generator cut out RPM.
 Weight penalty = Approximately 3 to 5 pounds.

STATINTL

Approved For Release 2001/06/09 : CIA-RDP69B00279R000100110001-2

Approved For Release 2001/06/09 : CIA-RDP69B00279R000100110001-2

LOCKHEED - CALIFORNIA COMPANY		ENGINEERING STUDY <input type="checkbox"/>		LAC 22-6-1							
		CHANGE PROPOSAL <input checked="" type="checkbox"/>									
DATE 29 NOVEMBER 1965		AFFECTS: WSPO <input checked="" type="checkbox"/>		PROJECT <input type="checkbox"/>							
NAME OF MAJOR COMPONENT ARC-50 AY		PART OR LOWEST SUBASSEMBLY		PART NO. & MODEL OR TYPE							
TITLE OF PROPOSAL: ARC-50 AY INSTALLATION KITS FOR FIVE (5) KC-135'S											
<p>NATURE OF PROPOSAL:</p> <p>This ECP provides the kits necessary to incorporate ARC-50 AY communication equipment in five (5) additional KC-135 Tankers, Serials 59-1504, 59-1512, 59-1513, 59-1520 and 59-1523. These kits will incorporate changes previously accomplished by Service Bulletins 251, 252, 470, 547, 678 and 718.</p> <p>Existing spare ARC-50 AY Equipment will be used to outfit the KC-135's. This equipment is reworked GFP ARQ-23 sets procured on Purchase Request 428.</p>											
<p>REASON FOR PROPOSAL:</p> <p>Requirement established by [REDACTED].</p> <p>This ECP is in accordance with [REDACTED], letter Dick to Temp, dated 10 October 1964 and [REDACTED].</p> <p>Reason for Revision: To submit Target/Ceiling Price.</p>											
ES	ESTIMATED COST AND TIME INVOLVED:										
	ADDITIONAL FUNDING REQUIRED:										
CP	ESTIMATED COST FOR KITS OR PARTS:										
	ADDITIONAL FUNDING REQUIRED: See Page 2.										
ITEMS AFFECTED BY PROPOSAL:											
SAFETY	MISSION EFFECTIVENESS	PERFORMANCE	OPERATING PROCEDURE	INTER-CHANGEABILITY	WEIGHT OR WEIGHT & BALANCE	TOOLS & SUPPORT EQUIPMENT	MAINTENANCE PROCEDURE	SERVICE LIFE	FLIGHT MANUAL	MAINTENANCE MANUAL	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
EST. MAN/HRS. REQ'D. TO ACCOMPLISH CHANGE IN FIELD											
SOURCE OF PARTS FOR KIT						AVAILABILITY _____ WEEKS AFTER APPROVAL					
SERVICE BULLETIN 678											
DISPOSITION OF SPARES AFFECTED											
INITIATED BY:						APPROVED: WSPO					
SPO Approved For Release 2001/06/09 : CIA-RDP69B00279R000100110001-2						ILLEGIB					

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Approved For Release 2001/06/09 : CIA-RDP69B00279R000100110001-2

Approved For Release 2001/06/09 : CIA-RDP69B00279R000100110001-2

DATE 1800Z 09 FEB 65

SECRET

TO : DIRECTOR
FROM : [REDACTED] 25X1A
ACTION:
INFO :

1	MD	9	DEA
2	"	10	CD
3	commo	11	RB
4	"	12	
5	oxl	13	
6	dtail	14	
7	/	15	
8		16	

ROUTINE

IN 71058

TOR: 1837Z 09 FEB 65

OSA 1-15

TO [REDACTED] 25X1A INFO [REDACTED] 25X1A CITE [REDACTED] 25X1A

ATTN: [REDACTED]

SUBJECT: ARC-50 PROGRAM - STATUS OF GROUND STATIONS

OXCAR

1. AT PRESENT TIME THERE ARE TWO ARC-50 (GY) GROUND

STATIONS AT [REDACTED]

2. PLAN TO DELIVER TWO ADDITIONAL ARC-50 (GY) GROUND STATIONS DURING WEEK OF MARCH 8, 1965, AND ONE DURING WEEK OF MARCH 15, 1965. PLEASE ADVISE DISPOSITION.

3. GRD-11 GROUND UNF-DF EQUIPMENT IS NOT PART OF ARC-50 (GY) GROUND STATION EQUIPMENT. IF DF CAPABILITY IS DESIRED, THIS EQUIPMENT MUST BE USED IN CONJUNCTION WITH ARC-50 (GY). PROCUREMENT THROUGH GFE.

4. CONSIDERABLE CONFUSION HAS ARISEN REGARDING ARC-50 (GY) DESIGNATION, SOMETIMES ERRONEOUSLY REFERRED TO AS GRC-115. GRC-115 IS ARQ-23 GROUND STATION, NOT COMPATIBLE WITH ARC-50'S. USE OF ARC FOR GROUND STATION DESIGNATION IS ALSO ERRONEOUS. WE SUGGEST ESTABLISHING A NEW

SECRET

GROUP 1
EXCLUDED FROM AUTO-
MATIC DOWNGRADING
AND DECLASSIFICATION

LOCKHEED-CALIFORNIA COMPANY		ENGINEERING STUDY <input type="checkbox"/>		LAC 22-71-1							
		CHANGE PROPOSAL <input checked="" type="checkbox"/>									
DATE 29 NOVEMBER 1965		AFFECTS: WSPO <input type="checkbox"/>		PROJECT <input checked="" type="checkbox"/>							
NAME OF MAJOR COMPONENT PERISCOPE		PART OR LOWEST SUBASSEMBLY		PART NO. & MODEL OR TYPE							
TITLE OF PROPOSAL : A-12 ADDITIONAL FORWARD LOOK CAPABILITY											
NATURE OF PROPOSAL : This ECP is for the manufacture of fifteen (15) lens required to outfit all periscopes with the forward look capability. The lens was developed under ECP 22-13. Two additional lens are presently available (procured under OT-22 Call PR 65-0696) and will become spares. This ECP also covers the design, development and manufacture of fifteen (15) new reticles required due to the changed ground display presented by the forward look lens.											
REASON FOR PROPOSAL : This ECP is revised to provide equipment required to outfit all periscopes with the forward look capability as requested by HQ's message 0077, dated 18 June 1965. This was previously requested by [REDACTED] dated 18 June 1965. The lens and reticles will be installed in the field by the [REDACTED] Technical Representatives as a part of their normal duties under Contract WM-66. We are proceeding with this job as directed.											
ESTIMATED COST AND TIME INVOLVED : ADDITIONAL FUNDING REQUIRED :											
ESTIMATED COST FOR KITS OR PARTS : ADDITIONAL FUNDING REQUIRED :											
Target Price \$55,122 Ceiling Price \$60,634											
ITEMS AFFECTED BY PROPOSAL :											
SAFETY	MISSION EFFECTIVENESS	PERFORMANCE	OPERATING PROCEDURE	INTER-CHANGEABILITY	WEIGHT OR WEIGHT & BALANCE	TOOLS & SUPPORT EQUIPMENT	MAINTENANCE PROCEDURE	SERVICE LIFE	FLIGHT MANUAL	MAINTENANCE MANUAL	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
EST. MAN/HRS. REQ'D. TO ACCOMPLISH CHANGE IN FIELD											
SOURCE OF PARTS FOR KIT SERVICE BULLETIN 935						AVAILABILITY _____ WEEKS AFTER APPROVAL Lens: 2 ea. by 8/15/65, 2 ea./Mo. thereafter. Reticles: 4 ea. by 8/15/65, Bal. 9/15/65					
DISPOSITION OF SPARES AFFECTED											
OLD RETICLES AND LENS ARE TO BE STORED AT DEPOT FOR POSSIBLE FUTURE USE.											
INITIATED BY : Approved For Release 2001/06/09 : CIA-RDP69B00279R000100110001-2						APPROVED : [REDACTED] ILLEGIB					

*Amended 9
CT-22*

STATINTL

Approved For Release 2001/06/09 : CIA-RDP69B00279R000100110001-2

Approved For Release 2001/06/09 : CIA-RDP69B00279R000100110001-2

Approved For Release 2001/06/09 : CIA-RDP69B00279R000100110001-2		ENGINEERING STUDY <input type="checkbox"/>		LAC 22-73							
LOCKHEED-CALIFORNIA COMPANY		CHANGE PROPOSAL <input checked="" type="checkbox"/>									
DATE 28 April 1965		AFFECTS: WSPO <input checked="" type="checkbox"/>		PROJECT <input type="checkbox"/>							
NAME OF MAJOR COMPONENT		PART OR LOWEST SUBASSEMBLY		PART NO. & MODEL OR TYPE							
TITLE OF PROPOSAL : HYDROGEN IGNITION SYSTEM FOR YF-12A'S											
<p>NATURE OF PROPOSAL :</p> <p>This ECP consists of engineering, production of kits, and subsequent installation effort required to install a hydrogen ignition system into all YF-12A's.</p> <p>ADP will furnish only the materials and services required to make the YF-12A's compatible with this new ignition system; this ECP excludes any effort on the ignition system hardware.</p> <p>Budgetary estimate for this program is as follows:</p> <table style="margin-left: 100px;"> <tr> <td>Engineering</td> <td style="text-align: right;">\$1,500</td> </tr> <tr> <td>Production of Kits</td> <td style="text-align: right;">\$5,000</td> </tr> <tr> <td>Installation</td> <td style="text-align: right;">\$4,000</td> </tr> </table>						Engineering	\$1,500	Production of Kits	\$5,000	Installation	\$4,000
Engineering	\$1,500										
Production of Kits	\$5,000										
Installation	\$4,000										
<p>REASON FOR PROPOSAL :</p> <p>Request from SPO (Ref. letter Ed R. to Rus dated 5 April 1965)</p> <div style="text-align: right; margin-top: 50px;"> <i>5,500 per ECP 15 Jun 65</i> </div>											
ES	ESTIMATED COST AND TIME INVOLVED :										
	ADDITIONAL FUNDING REQUIRED :										
CP	ESTIMATED COST FOR KITS OR PARTS : Budgetary Estimate for Total Program \$10,500										
	ADDITIONAL FUNDING REQUIRED :										
ITEMS AFFECTED BY PROPOSAL :											
SAFETY <input type="checkbox"/>	MISSION EFFEC- TIVENESS <input type="checkbox"/>	PERFORM- ANCE <input type="checkbox"/>	OPERATING PROCEDURE <input type="checkbox"/>	INTER- CHANGE- ABILITY <input type="checkbox"/>	WEIGHT OR WEIGHT & BALANCE <input type="checkbox"/>	TOOLS & SUPPORT EQUIPMENT <input type="checkbox"/>	MAINTENANCE PROCEDURE <input type="checkbox"/>	SERVICE LIFE <input type="checkbox"/>	FLIGHT MANUAL <input type="checkbox"/>	MAINTENANCE MANUAL <input type="checkbox"/>	
EST. MAN/HRS. REQ'D. TO ACCOMPLISH CHANGE IN FIELD											
SOURCE OF PARTS FOR KIT				AVAILABILITY _____ WEEKS AFTER APPROVAL							
SERVICE BULLETIN TO BE WRITTEN											
DISPOSITION OF SPARES AFFECTED											
N/A											
INITIATED BY :				APPROVED : WSPO							
Approved 589 Release 2001/06/09 : CIA-RDP69B00279R				ILLEGIB							

IGNITION SYSTEMS

LIST OF MAIN DIFFERENCES

TEB

Pyrophoric Ignition
Essentially a chemical system with electric current to dump solenoid only. Electric current (1 amp only) required at dump.
Remaining TEB may be dumped after touchdown for safety.

H₂

Electrical Ignition
H₂ gas-D.C. electric system.
Requires continuous D.C. current.
Requires 3 glow plugs in each engine:
Left main engine plug on Essential D.C. bus (This is only plug in each engine that remains on battery if both engines are out) right main engine plug on monitor bus, and afterburner plug on monitor bus.
11 amps (D.C.) starting current and 4 1/2 amps (D.C.) steady state current at each glow plug (Total starting amps = 66; total steady amps = 27.)
Dump of remaining H₂ not required.

H₂ IGNITION SYSTEM

ADVANTAGES

More ignition firings (20+).
Less hazardous.
Uses CIS system except for plug and new wiring.
Doesn't need special ground support equipment.
Cheaper.
Cleaner combustion.
No tube plugging problem.
Better air starts.

DISADVANTAGES

Potential electric failure.
High current load (surge) to initiate system.
Ability of current equipment to contain H₂ under pressure must be determined.
System must be on continually in order to avoid warmup period.
Dual flameout case may not have sufficient battery capacity for relight if below generator cut out RPM.
Weight penalty = Approximately 3 to 5 pounds.

LOCKHEED-CALIFORNIA COMPANY		ENGINEERING STUDY <input type="checkbox"/>		LAC 22-72							
		CHANGE PROPOSAL <input checked="" type="checkbox"/>									
DATE 28 April 1965		AFFECTS: WSPO <input checked="" type="checkbox"/>		PROJECT <input type="checkbox"/>							
NAME OF MAJOR COMPONENT		PART OR LOWEST SUBASSEMBLY		PART NO. & MODEL OR TYPE							
TITLE OF PROPOSAL : RETROFIT OF PRODUCTION ADP INLET CONTROL INTO ALL YF-12A'S											
NATURE OF PROPOSAL : This ECP consists of all engineering, production of kits and subsequent installation effort required to outfit three (3) YF-12A airplanes with the Production ADP Inlet Control System. Budgetary estimate for this program is as follows: Engineering Production of Kits Installation Spares & AGE [REDACTED] STATINTL Note: This installation will include a spike and forward by-pass door position indicating system.											
REASON FOR PROPOSAL : Request from SPO, (Ref. letter Ed R. to Rus dated 5 April 1965). We are proceeding with this job per verbal approval given by [REDACTED] to Kelly. STATINTL											
ES		ESTIMATED COST AND TIME INVOLVED :									
		ADDITIONAL FUNDING REQUIRED :									
CP		ESTIMATED COST FOR KITS OR PARTS: Budgetary Estimate for Total Program [REDACTED] STATINTL									
		ADDITIONAL FUNDING REQUIRED :									
ITEMS AFFECTED BY PROPOSAL :											
SAFETY	MISSION EFFEC- TIVENESS	PERFORM- ANCE	OPERATING PROCEDURE	INTER- CHANGE- ABILITY	WEIGHT OR WEIGHT & BALANCE	TOOLS & SUPPORT EQUIPMENT	MAINTENANCE PROCEDURE	SERVICE LIFE	FLIGHT MANUAL	MAINTENANCE MANUAL	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
EST. MAN/HRS. REQ'D. TO ACCOMPLISH CHANGE IN FIELD											
SOURCE OF PARTS FOR KIT						AVAILABILITY _____ WEEKS AFTER APPROVAL					
SERVICE BULLETIN TO BE WRITTEN											
DISPOSITION OF SPARES AFFECTED											
INITIATED BY : SPO						APPROVED : WSPO					
Approved For Release 2001/06/09 : CIA-RDP69B00279R000100110001-2						[REDACTED] ILLEGIB					

LOCKHEED INLET CONTROLS

LIST OF MAIN DIFFERENCES

HAM-STD SYSTEM

Essentially non-electronic (except for a few switches) mechanical, hydraulic, pneumatic-mechanical computer. Computer located in nacelle-subject to 300° heat in oil cooled enclosure. Probe is near inlet-M is picked up off nacelle; α & β are picked up off inbd leading edge half way between nacelle and fuselage. No manual backup for computer. Moderate spike actuator diameter. Uses rotating probe with combined α & β signal. "Basic system tolerance does not assure reliable operation".

ADP/AIRESEARCH SYSTEM

Electronics essential and integrated in electronic, mechanical, hydraulic, pneumatic system-electronic computer. Computer located in E-bay air conditioned environment (or missile bay on YF-12A). Probe is on nose of fuselage for M, α & β . Manual backup provided to offset computer failure. Increased spike actuator diameter. Uses separate and fixed α & β sensors.

ADP/AIRESEARCH SYSTEM

ADVANTAGES

"Improved System Performance"
Higher degree of accuracy and rate -4°/sec yaw and 7° sideslip (H/S good to 3 1/2 sec low, and only 2°/sec at high alt.) Sideslip angle measurement now practical (off nose boom). Clear cut mach number off nose boom (M at nacelle varies with α & β and introduces complexity into scheduling and dynamic response. Less complicated flow field at nose.) More accurate measurement of α & β . (Local α & β at nacelle vary from true α & β in a complex way, making accurate programming difficult) Independent α & β pickups contributes to more accurate scheduling than combined control. More reliable switches. Less dynamic difficulties. Less oscillation. No noticeable limit cycle (This has been noticeable in H/S system) Better control of servo loops. Greater system flexibility due to separation of α & β pickup and use of electronics. Larger diameter spike actuator more rugged. Manual backup improves reliability. Local flow caused by missile firings less disturbing on spike position with pitot at nose than at nacelle

DISADVANTAGES

High degree of electronic competence needed from service personnel. Probe on fuselage measures fuselage deflection as well as α . However, this error has proven fairly predictable for known flight patterns. Requires higher premium, air conditioned space in "E" bay; or use of missile bay space on prototypes. Layup time is six weeks and requires approximately 2000 man hours. Weight penalty = approximately 10 lbs.

Approved For Release 2001/05/09 : CIA-RDP69B00279R000100110001-2																															
LOCKHEED-CALIFORNIA COMPANY				ENGINEERING STUDY <input type="checkbox"/>				LAC 22-70																							
				CHANGE PROPOSAL <input checked="" type="checkbox"/>																											
DATE 27 April 1965				AFFECTS: WSPO <input type="checkbox"/>				PROJECT <input checked="" type="checkbox"/>																							
NAME OF MAJOR COMPONENT			PART OR LOWEST SUBASSEMBLY				PART NO. & MODEL OR TYPE																								
TITLE OF PROPOSAL : IMPROVED WHEELS AND BRAKES FOR A-12																															
<p>NATURE OF PROPOSAL: This proposal is for the replacement of all wheels and brakes used on A-12's S/N's 121,122,124 - 132. The proposed new brakes and wheels are of the configuration developed for and to be used by S/N's 134 and 135. Thirty wheels and brakes were previously procured under DK-3665 for 134 & 135. We propose to provide an additional 125 wheels and brakes under this ECP. This would bring the total wheel and brake assets to 155 for thirteen (13) airplanes, resulting in 100% Spares. Summary:</p> <table style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">S/N</th> <th style="text-align: center;">Installed</th> <th style="text-align: center;">Spares</th> <th style="text-align: center;">Total</th> <th></th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">134,135</td> <td style="text-align: center;">12</td> <td style="text-align: center;">18</td> <td style="text-align: center;">30</td> <td>(DK-3665)</td> </tr> <tr> <td style="text-align: center;">121,122,124-132</td> <td style="text-align: center;">66</td> <td style="text-align: center;">59</td> <td style="text-align: center;">125</td> <td>(This ECP)</td> </tr> <tr> <td style="text-align: center;">Total</td> <td style="text-align: center;">78</td> <td style="text-align: center;">77</td> <td style="text-align: center;">155</td> <td></td> </tr> </tbody> </table>												S/N	Installed	Spares	Total		134,135	12	18	30	(DK-3665)	121,122,124-132	66	59	125	(This ECP)	Total	78	77	155	
S/N	Installed	Spares	Total																												
134,135	12	18	30	(DK-3665)																											
121,122,124-132	66	59	125	(This ECP)																											
Total	78	77	155																												
<p>REASON FOR PROPOSAL :</p> <ol style="list-style-type: none"> Headquarters MGS. 6463 requests an ECP. Please, also, refer to letter, Kelly to John, dated 9 April 1965 on the same subject. We request that the Depot be authorized to issue a Purchase Request under Contract CT-22 as follows: <table style="width:100%; border-collapse: collapse;"> <tr> <td style="width:30%;">a. P/N AA319945</td> <td style="width:20%;">Brake Assy</td> <td style="width:10%;">Qty. 125</td> <td style="width:40%;">(Budgetary Price \$1,034 ea.)</td> </tr> <tr> <td>b. P/N 219A719</td> <td>Wheel</td> <td>Qty. 125</td> <td>(Budgetary Price \$635 ea.)</td> </tr> </table> 												a. P/N AA319945	Brake Assy	Qty. 125	(Budgetary Price \$1,034 ea.)	b. P/N 219A719	Wheel	Qty. 125	(Budgetary Price \$635 ea.)												
a. P/N AA319945	Brake Assy	Qty. 125	(Budgetary Price \$1,034 ea.)																												
b. P/N 219A719	Wheel	Qty. 125	(Budgetary Price \$635 ea.)																												
ES	ESTIMATED COST AND TIME INVOLVED :																														
	ADDITIONAL FUNDING REQUIRED :																														
CP	ESTIMATED COST FOR KITS OR PARTS : Budgetary Estimate for CT-22 Call \$208,625																														
	ADDITIONAL FUNDING REQUIRED :																														
ITEMS AFFECTED BY PROPOSAL :																															
SAFETY <input type="checkbox"/>	MISSION EFFEC- TIVENESS <input type="checkbox"/>	PERFORM- ANCE <input type="checkbox"/>	OPERATING PROCEDURE <input type="checkbox"/>	INTER- CHANGE- ABILITY <input type="checkbox"/>	WEIGHT OR WEIGHT & BALANCE <input type="checkbox"/>	TOOLS & SUPPORT EQUIPMENT <input type="checkbox"/>	MAINTENANCE PROCEDURE <input type="checkbox"/>	SERVICE LIFE <input type="checkbox"/>	FLIGHT MANUAL <input type="checkbox"/>	MAINTENANCE MANUAL <input type="checkbox"/>																					
EST. MAN/HRS. REQ'D. TO ACCOMPLISH CHANGE IN FIELD																															
SOURCE OF PARTS FOR KIT (SERVICE BULLETIN TO BE ISSUED FOR INSTRUCTIONS ONLY)						AVAILABILITY 12-14 WEEKS AFTER APPROVAL COMPLETE DELIVERY 18-21 WEEKS																									
DISPOSITION OF SPARES AFFECTED																															
SCRAP (SALVAGE WHEEL BEARINGS) ILLEGIB STATINTL																															
INITIATED BY :						APPROVED :																									
Approved For Release 2001/05/09 : CIA-RDP69B00279R000100110001-2						<div style="background-color: black; width: 100px; height: 20px; display: inline-block;"></div> <div style="background-color: black; width: 100px; height: 20px; display: inline-block;"></div>																									

25X1A

ORIG: [REDACTED] 21 34
UNIT: 701 SA-10/001
EXT: 1110
DATE: 25 JAN 1965

CLASSIFIED MESSAGE

**TOP
SECRET**

ROUTING	
1	AD/OSA
2	AD/OSA
3	D/PA/OSA
4	ORC/PA
5	CC/PA
6	PA/OSA
7	ORC
8	ORC

DEFERRED	PRIORITY	INITIAL
XX ROUTINE	OPERATIONAL IMMEDIATE	INITIAL

25X1A

TO: [REDACTED]
FROM: DIRECTOR
CONF:
INFO:

OSA 1-15-78

03443

25X1A

INFO

25X1A

CITE

25X1A

25X1A

OXCART

REF PROPOSED OPERATION FROM KADENA AIR BASE HAVING 11000 FT
RUNWAY WITH ONLY 1000 FT OVEREUN REQUEST:

- A. YOU EXERT EVERY POSSIBLE EFFORT TO PROVIDE ABSOLUTELY
RELIABLE BRAKES ON ALL ARTS.
- B. YOU INVESTIGATE POSSIBLE USE OF THE BAK-9 AND NA-1A
BARRIERS
JET ENGINES INSTALLED AT KADENA AIR BASE FOR EMERGENCY
ARRESTING OF THE ART IN CASE OF ABORTED TAKE OFF OR
EMERGENCY LANDING AT HIGH GROSS WEIGHTS AND ADVISE
[REDACTED] OF RESULTS.

25X1A

END OF MESSAGE

CS/OSA FILE COPY

JAK.

25X1A

COORDINATING OFFICERS

TOP SECRET

GROUP 1
Excluded from automatic
downgrading and
declassification

C/AD/OSA

AUTHENTICATING OFFICER

Copy No. 6

25X1A

REPRODUCTION BY OTHER THAN THE ISSUING OFFICE IS PROHIBITED.

OSA - 0753-65

3 February 1965

STATINTL

To: [REDACTED]

Subject: RESULTS OF ARC-50 PROVISIONING CONFERENCE OF
18 AND 19 JANUARY 1965 AT ADP

The attached list of ARC-50 equipment represents the items to be procured by ADP, under the two (2) designated contracts, as a result of the subject conference.

The basic ground rules used for establishing the level of equipment indicated were:

1. R-12 HA-3666 support requirements are based upon twelve (12) ships (out of the twenty-five (25)).
2. All ARC-50 assets are considered a common pool available to any base requiring the equipment.
3. Ground Station sub-assembly spares components (below modular level) procured under ECP 22-7 are to be sent to [REDACTED] for use as bonded spares.
4. Further provisioning required will be accomplished whenever necessary by the Depot and ADP.
5. The two (2) ground stations (GY configuration) presently on order under HT-3664 were to be canceled. We have placed a "stop work" order on these two (2) units and are waiting for a formal request to cancel.
6. Field maintenance shall be limited to the replacement of Modular Components (with minor exceptions only).
7. ECP 22-65 would be revised to provide the KC-135 ARC-50 Kits, less the five (5) sets of ARC-50 AY Equipment.

The two HT-3664 "GY" ground stations (5. above) were placed on order 15 September 1964 at an estimated price of \$140,000 ea. Estimated cancellation cost would be approximately \$45,000. If go-ahead was again given as of this date, estimated delivery would be in July 1965. Intended location for these two ARC-50 GY's is at your discretion.

-2-

We are proceeding with ECP 22-65 (less ARC-50 Equipment) and ECP 22-64 (as submitted to you) in the interest of avoiding any possible delays.

We were requested to initiate procurement action on the attached quantities with formal approval to be given upon receipt of this summary. As a part of your formal approval, we request that the Depot issue Purchase Requests for the Contract CT-22 quantities indicated in the attachment.

Also attached is a copy of the work sheets used as a guide during the provisioning conference (as revised 25 January 1965).

Yours truly,



STATINTL

STATINTL

cc:



(2)

ARC-50 EQUIPMENT TO BE PROCURED BY ADP
AS A RESULT OF THE
18 AND 19 JANUARY 1965 CONFERENCE

	<u>Part Number</u>	<u>Nomenclature</u>	<u>CT-22</u> <u>Qty.</u>	<u>HA-3666</u> <u>Qty.</u>	<u>Budgetary</u> <u>Unit Price</u>
1	714295-801	Oscillator	6	6	
2	714221-802	Receiver	6	6	
3	714222-802	Programmer	6	6	
4	714223-801	Generator	6	6	
5	714224-802	Modem	1	5	
6	714016-801	Power Supply	3	0	
7	714220-801	Module - Range	6	6	
8	714219-802	Chassis	1	1	
9	714008-801	Power Supply	3	5	
10	714001-802	Transceiver (R-T)	4	0	
11	713953-801	Power Supply	5	9	
12	713950-802	Oscillator	9	27	
13	713961-802	Synthesizer	7	8	
14	713954-802	Multiplier	7	17	
15	713956-802	Receiver - Main	7	17	
16	713952-802	Converter	7	17	
17	713951-802	Receiver - Guard	7	11	
18	713957-802	Modem	7	17	
19	714850-801	Transmitter	7	17	
20	713922-802	Chassis	2	2	
21	713965-804	Translator	4	0	
22	713997-801	Relay	1	0	
23	713996-801	Relay	1	0	
24	714004-801	Control - Gnd. Sta.	5	0	
25	714686-801	Amplifier	1	0	
26	713969-801	Selector	1	0	
27	708662-801	Control - Transceiver	7	0	
28	708663-801	Control - Transceiver	0	7	
29	708665-801	Indicator - Range	0	8	
30	708946-801	Control - Translator	0	9	
31	708829-801	Control - Translator	7	0	
32	708977-801	Indicator - Frequency	0	6	
33	708810-801	Tester - Transmitter	1	0	
34	715094-801	Test Set - Transceiver	6	4	
35	708809-802	Test Set - Translator	1	0	
36	708808-802	Test Set - Transceiver	1	0	
37	708928-801	Test Set - Elect. Cable	2	4	

STATINTL

ARC-50 EQUIPMENT TO BE PROCURED BY ADP
AS A RESULT OF THE
18 AND 19 JANUARY 1965 CONFERENCE

	<u>Part Number</u>	<u>Nomenclature</u>	<u>CT-22</u> <u>Qty.</u>	<u>HA-3666</u> <u>Qty.</u>	<u>Budgetary</u> <u>Unit Price</u>
1	714295-801	Oscillator	6	6	
2	714221-802	Receiver	6	6	
3	714222-802	Programmer	6	6	
4	714223-801	Generator	6	6	
5	714224-802	Modem	1	5	
6	714016-801	Power Supply	3	0	
7	714220-801	Module - Range	6	6	
8	714219-802	Chassis	1	1	
9	714008-801	Power Supply	3	5	
10	714001-802	Transceiver (R-T)	4	0	
11	713953-801	Power Supply	5	9	
12	713950-802	Oscillator	9	27	
13	713961-802	Synthesizer	7	8	
14	713954-802	Multiplier	7	17	
15	713956-802	Receiver - Main	7	17	
16	713952-802	Converter	7	17	
17	713951-802	Receiver - Guard	7	11	
18	713957-802	Modem	7	17	
19	714850-801	Transmitter	7	17	
20	713922-802	Chassis	2	2	
21	713965-804	Translator	4	0	
22	713997-801	Relay	1	0	
23	713996-801	Relay	1	0	
24	714004-801	Control - Gnd. Sta.	5	0	
25	714686-801	Amplifier	1	0	
26	713969-801	Selector	1	0	
27	708662-801	Control - Transceiver	7	0	
28	708663-801	Control - Transceiver	0	7	
29	708665-801	Indicator - Range	0	8	
30	708946-801	Control - Translator	0	9	
31	708829-801	Control - Translator	7	0	
32	708977-801	Indicator - Frequency	0	6	
33	708810-801	Tester - Transmitter	1	0	
34	715094-801	Test Set - Transceiver	6	4	
35	708809-802	Test Set - Translator	1	0	
36	708808-802	Test Set - Transceiver	1	0	
37	708928-801	Test Set - Elect. Cable	2	4	

STATINTL

Approved For Release 2001/06/09 : CIA-RDP69B00279R000100110001-2	
LOCKHEED - CALIFORNIA COMPANY	ENGINEERING STUDY <input type="checkbox"/> CHANGE PROPOSAL <input checked="" type="checkbox"/>
LAC 22-32-1	
DATE 29 NOVEMBER 1965	AFFECTS: WSPO <input type="checkbox"/> PROJECT <input checked="" type="checkbox"/>
NAME OF MAJOR COMPONENT	PART OR LOWEST SUBASSEMBLY
PART NO. & MODEL OR TYPE	
TITLE OF PROPOSAL : IMPROVED FIRE WARNING SYSTEM	
NATURE OF PROPOSAL : Install new Fenwall Fire Warning System to replace Edison Temperature System. Fenwall System will be incorporated in all A-12 Articles. This will provide a reliable system with an expected 20,000 hours flight time per false warning.	
REASON FOR PROPOSAL : 1. The Fenwall Fire Warning Sensing Loop is sensitive to localized high temperature conditions. Edison system was based upon average temperature conditions. 2. Fenwall system is composed of two (2) sensing loops placed side by side. Both loops must indicate that a high nacelle temperature exists before the pilot is notified of a high temperature condition. 3. Reason for Revision: To submit Target/Ceiling Price. <div style="text-align: right; margin-top: 20px;"> <i>Amend 9</i> <i>CT-22</i> </div>	
ES	ESTIMATED COST AND TIME INVOLVED :
	ADDITIONAL FUNDING REQUIRED :
CP	ESTIMATED COST FOR KITS OR PARTS :
	ADDITIONAL FUNDING REQUIRED : See Page 2.
ITEMS AFFECTED BY PROPOSAL :	
SAFETY <input checked="" type="checkbox"/>	MISSION EFFEC- TIVENESS <input checked="" type="checkbox"/>
PERFORM- ANCE <input type="checkbox"/>	OPERATING PROCEDURE <input type="checkbox"/>
INTER- CHANGE- ABILITY <input type="checkbox"/>	WEIGHT OR WEIGHT & BALANCE <input type="checkbox"/>
TOOLS & SUPPORT EQUIPMENT <input type="checkbox"/>	MAINTENANCE PROCEDURE <input type="checkbox"/>
SERVICE LIFE <input type="checkbox"/>	FLIGHT MANUAL <input type="checkbox"/>
MAINTENANCE MANUAL <input type="checkbox"/>	
EST. MAN/HRS. REQ'D. TO ACCOMPLISH CHANGE IN FIELD	
SOURCE OF PARTS FOR KIT SERVICE BULLETIN 611	AVAILABILITY _____ WEEKS AFTER APPROVAL
DISPOSITION OF SPARES AFFECTED WILL BE DETERMINED BY CUSTOMER DEPOT	
ILLEGIB	
INITIATED BY : LAC	APPROVED : [REDACTED]
Approved For Release 2001/06/09 : CIA-RDP69B00279R000100110001-2 - 12/28/65	

STATINTL

Approved For Release 2001/06/09 : CIA-RDP69B00279R000100110001-2

Approved For Release 2001/06/09 : CIA-RDP69B00279R000100110001-2

LOCKHEED - CALIFORNIA COMPANY

ENGINEERING STUDY ☐CHANGE PROPOSAL ☒

LAC 22-56-1

DATE

29 ~~NOVEMBER~~ 1965

AFFECTS:

WSPO ☐PROJECT ☒

NAME OF MAJOR COMPONENT

PART OR LOWEST SUBASSEMBLY

PART NO. & MODEL OR TYPE

TITLE OF PROPOSAL:

MEASUREMENT OF ROLL, PITCH AND YAW

NATURE OF PROPOSAL:

This ECP will provide a method of accurately determining airplane roll, pitch and yaw. A 70mm camera will be fixed to the structure of the airplane and will be run at the same time as the Type I or Type II system.

This ECP includes the design and manufacture of one comparator system, development of the computer program required to analyze comparator data and five (5) data runs with Type I or Type II System.

REASON FOR PROPOSAL:

This ECP provides a method for checking the performance and quality of the airplane camera systems. For a more comprehensive description of this program, please refer to the letter [REDACTED] to John Parangosky, dated 3 September 1964 on the subject of A-12 optical provisions.

Budgetary ECP approval TWX [REDACTED]

Reason for Revision: To submit Target/Ceiling Price.

Amend 9
CT-22

ES

ESTIMATED COST AND TIME INVOLVED:

ADDITIONAL FUNDING REQUIRED:

CP

ESTIMATED COST FOR KITS OR PARTS:

ADDITIONAL FUNDING REQUIRED:

See Page 2.

ITEMS AFFECTED BY PROPOSAL:

SAFETY

MISSION
EFFECT-
TIVENESSPERFORM-
ANCEOPERATING
PROCEDUREINTER-
CHANGE-
ABILITYWEIGHT OR
WEIGHT &
BALANCETOOLS &
SUPPORT
EQUIPMENTMAINTENANCE
PROCEDURESERVICE
LIFEFLIGHT
MANUALMAINTENANCE
MANUAL

EST. MAN/HRS. REQ'D. TO ACCOMPLISH CHANGE IN FIELD

SOURCE OF PARTS FOR KIT

NOT APPLICABLE

AVAILABILITY _____

WEEKS AFTER APPROVAL

DISPOSITION OF SPARES AFFECTED

NOT APPLICABLE

ILLEGIB

INITIATED BY:

APPROVED:

001-2

PROJECT

11-12/28/65

STATINTL

Approved For Release 2001/06/09 : CIA-RDP69B00279R000100110001-2

Approved For Release 2001/06/09 : CIA-RDP69B00279R000100110001-2

LOCKHEED - CALIFORNIA COMPANY		ENGINEERING STUDY <input type="checkbox"/>	22-37							
		CHANGE PROPOSAL <input checked="" type="checkbox"/>								
DATE 15 June 1965		AFFECTS: WSPO <input type="checkbox"/>	PROJECT <input checked="" type="checkbox"/>							
NAME OF MAJOR COMPONENT		PART OR LOWEST SUBASSEMBLY		PART NO. & MODEL OR TYPE						
TITLE OF PROPOSAL : WORLD-WIDE CAPABILITY FLIGHT TESTS										
NATURE OF PROPOSAL : This ECP covers the activities necessary to conduct World-Wide Capability flight tests of INS equipment in one (1) C-54 aircraft. Activities include: 1. Installation design, liaison and monitor the results of the flight test program. 2. Fabrication and subsequent installation of kit in the C-54 aircraft. 3. Restoration of C-54 to original configuration after completion of testing.										
[REDACTED] will contract for the conduction of flight test, data reduction and any associated work directly with Headquarters. No [REDACTED] effort is included in this ECP.										
REASON FOR PROPOSAL :										
Letter, Kelly to John, same subject, dated 4-29-65.										
ES	ESTIMATED COST AND TIME INVOLVED :									
	ADDITIONAL FUNDING REQUIRED :									
CP	ESTIMATED COST FOR KITS OR PARTS :									
	ADDITIONAL FUNDING REQUIRED : Budgetary Estimate \$40,000									
ITEMS AFFECTED BY PROPOSAL :										
SAFETY	MISSION EFFEC- TIVENESS	PERFORM ANCE	OPERATING PROCEDURE	INTER- CHANGE ABILITY	WEIGHT OR WEIGHT & BALANCE	TOOLS & SUPPORT EQUIPMENT	MAINTEN- ANCE PROCEDURE	SERVICE LIFE	LOG I- STIC	MAINTEN- ANCE MANUAL
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
EST. MAN/HRS. REQ'D. TO ACCOMPLISH CHANGE IN FIELD										
SOURCE OF PARTS FOR KIT						AVAILABILITY		WEEKS AF		ADJUTAL
NO KIT REQUIRED - FLIGHT TEST INSTALLATION ONLY										
DISPOSITION OF SPARES AFFECTED										
Approved For Release 2001/06/09 : CIA-RDP69B00279R000100110001-2										
INITIATED BY :						APPROVED : [REDACTED]				

LOCKHEED - CALIFORNIA COMPANY

ENGINEERING STUDY ☐CHANGE PROPOSAL ☒

LAC 22-37

DATE 15 June 1965

AFFECTS:

WSPO ☐PROJECT ☒

NAME OF MAJOR COMPONENT

PART OR LOWEST SUBASSEMBLY

PART NO. & MODEL OR TYPE

TITLE OF PROPOSAL : WORLD-WIDE CAPABILITY FLIGHT TESTS

NATURE OF PROPOSAL:

This ECP covers the activities necessary to conduct World-Wide Capability flight tests of INS equipment in one (1) C-54 aircraft.

Activities include:

1. Installation design, liaison and monitor the results of the flight test program
2. Fabrication and subsequent installation of kit in the C-54 aircraft.
3. Restoration of C-54 to original configuration after completion of testing.

STATINTL [REDACTED] will contract for the conduction of flight test, data reduction and any associated work directly with Headquarters. No [REDACTED] effort is included in this ECP. STATINTL

REASON FOR PROPOSAL:

Letter, Kelly to John, same subject, dated 4-29-65.

South I believe

ES

ESTIMATED COST AND TIME INVOLVED:

ADDITIONAL FUNDING REQUIRED:

CP

ESTIMATED COST FOR KITS OR PARTS:

Budgetary Estimate

\$40,000

ADDITIONAL FUNDING REQUIRED:

ITEMS AFFECTED BY PROPOSAL:

SAFETY	MISSION EFFEC-TIVENESS	PERFORM-ANCE	OPERATING PROCEDURE	INTER-CHANGE ABILITY	WEIGHT OR WEIGHT & BALANCE	TOOLS & SUPPORT EQUIPMENT	MAINTENANCE PROCEDURE	SERVICE LIFE	FLIGHT MANUAL	MAINTENANCE MANUAL
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

EST. MAN/HRS. REQ'D. TO ACCOMPLISH CHANGE IN FIELD

SOURCE OF PARTS FOR KIT

NO KIT REQUIRED - FLIGHT TEST INSTALLATION ONLY

AVAILABILITY _____ WEEKS AFTER APPROVAL

STATINTL

DISPOSITION OF SPARES AFFECTED

NOT APPLICABLE

ILLEGIB [REDACTED]

INITIATED BY:

APPROVED: [REDACTED] J.C.L.

ADP Approved For Release 2001/06/09 : CIA-RDP69B00279R000100110001-2

30 Jun 65

SECRET

DIRECTOR

25X1A

25X1A

1	MD	9
2	"	10
3	DB	11
4	Ba	12
5	"	13
6	DB	14
7	CD	15
8	RB	16
ROUTINE		

TOR: 10 JUNE 65 1930Z

OSA 1-20
Pet

IN 92059

25X1A

INFO

25X1A

CITE

25X1A

SUBJECT: INS TRANS-EQUATOR FLIGHT TESTS.

REFERENCE

FOR 25X1A 25X1A

25X1A

THE FOLLOWING AFSC CONFIDENTIAL MESSAGES ARE QUOTED FOR YOUR INFORMATION: QUOTE

ROUTINE TO USAFSC INFO AFSC EGLIN AFB FLA, AFSC SILO US ARMY TROPIC TEST CENTER CANAL ZONE CONFIDENTIAL SCSST 24798, 8 JUN 65. FOR COMMANDER. PGLO. MAJ STRAIGHT. OUR SCSST 23323 DATED 22 MAY 65. PART 1. PROJECT RED LIGHT IS FLIGHT TEST OF CLASSIFIED NAVIGATION EQUIPMENT AND WILL INVOLVE A SERIES OF TEST FLIGHTS IN THE SOUTHERN HEMISPHERE TO 10 DEGREES SOUTH LATITUDE. TESTING IS SCHEDULED TO START ABOUT 14-17 JUNE AT HOWARD AFB. FLIGHTS AT THE RATE OF 2-4 PER WEEK FOR A PERIOD OF APPROXIMATELY ONE MONTH WILL BE REQUIRED. FLIGHTS WILL ORIGINATE AND TERMINATE AT HOWARD AFB AND WILL BE FLOWN OVER INTERNATIONAL WATERS. NO OVERFLIGHT OF FOREIGN COUNTRIES IS PLANNED AT THIS

SECRET

Approved For Release 2001/06/09 : CIA-RDP69B00279R000100110001-2

GROUP 1
EXCLUDED FROM AUTO-
MATIC DOWNGRADING
AND DECLASSIFICATION

25X1A

(IN 92059)

S E C R E T PAGE TWO

TIME. SHOULD IT BECOME APPARENT THAT OVERFLIGHT IS REQUIRED, THE TEST TEAM WILL FURNISH MAJOR STRAIGHT (AFSC STLO) WITH APPROPRIATE PLANNING DATA FOR FOREIGN CLEARANCE AT LEAST TWO WEEKS PRIOR TO THE SCHEDULED MISSION. THE OPR AT HQ USAF FOR THIS ACTIVITY IS COL LEO P. GEARY (AFRDC-F) AT HQ AFSC, MAJOR P. FRYBERGER (SCSZ). PART II. FIRM DEPARTURE DATE WILL BE PROVIDED IN TIME TO ARRANGE FOR APPROPRIATE CLEARANCES. GP 4. UNQUOTE

QUOTE

TO USAFSO INFO APGC EGLIN AFB FLA, AFSC STLO US ARMY TROPIC TEST CENTER CANAZ ZONE CONFIDENTIAL SCSZ 24977 10 JUN 65. USAFSO FOR COMMANDER. APGC FOR PGLO. AFSC STLO FOR MAJ STRAIGHT. SUBJECT: PROJECT RED LIGHT. REFERENCE AFSC UNCLAS MSG SCSST 23323 DATED 22 .MAY 65 AND CONF MSG SCSST 24798 DATED 8 JUN 65. PART I, FOR USAFSO. THE FOLLOWING INFORMATION IS SUBMITTED TO AID IN OBTAINING APPROPRIATE CLEARANCES FOR PERSONNEL ARRIVING IN YOUR THEATER DURING WEEK OF 14 JUNE 1965 FOR THE PURPOSE OF PERFORMING CLASSIFIED MISSIONS IN SUPPORT OF PROJECT RED LIGHT. THE FOLLOWING CIVILIAN PERSONNEL ARE ASSIGNED AS CREW MEMBERS ON C-54G, NUMBER 50477 ARRIVING APPROXIMATELY 15 JUNE 1965. ALL ARE US CITIZENS HOLDING MILITARY SECRET CLEARANCES:

25X1A

PART II FOR APGC. REQUEST THAT YOU FURNISH THE FOLLOWING INFORMATION TO USAFSO ON APGC CREW MEMBERS ASSIGNED TO SUPPORT PROJECT RED LIGHT: NAME, RANK, SERIAL NUMBER

25X1A

25X1A [REDACTED] IN 92059> S E C R E T PAGE THREE

AND SECURITY CLEARANCE. ADDITIONALLY REQUEST THAT APGC FURNISH
USAFSO WITH INFORMATION REQUIRED TO COMPLY WITH THE USAF
FOREIGN CLEARANCE GUIDE FOR THE CANAL ZONE, SPECIFICALLY PARAGRAPH 4,
"CONTENT OF ADVANCE NOTICE." GP 4. UNQUOTE

END OF MESSAGE

S E C R E T

Tagboard

LOCKHEED - CALIFORNIA COMPANY		ENGINEERING STUDY <input type="checkbox"/>		CHANGE PROPOSAL <input checked="" type="checkbox"/>		LAC 22-50					
DATE 17 June 1965		AFFECTS: WSPO <input type="checkbox"/>		PROJECT <input checked="" type="checkbox"/>							
NAME OF MAJOR COMPONENT		PART OR LOWEST SUBASSEMBLY		PART NO. & MODEL OR TYPE							
TITLE OF PROPOSAL: JC-130 COMMAND TRANSMITTER AND RECOVERY PARACHUTE SYSTEMS - TAGBOARD											
NATURE OF PROPOSAL: See Page 2.											
REASON FOR PROPOSAL: PHASE I: Originally authorized under Contract DK-3665, "Miscellaneous Approval No. 1, DK-3665", per [REDACTED] dated 10 December 1964. Now being transferred to Contract CT-22. PHASE II: In accordance with verbal discussions between [REDACTED] of ADP and [REDACTED]. We are not proceeding in Phase II pending finalization of quantities and chute configuration.											
ES		ESTIMATED COST AND TIME INVOLVED: ADDITIONAL FUNDING REQUIRED:									
CP		ESTIMATED COST FOR KITS OR PARTS: ADDITIONAL FUNDING REQUIRED: See Page 2.									
ITEMS AFFECTED BY PROPOSAL:											
SAFETY	MISSION EFFEC- TIVENESS	PERFORM- ANCE	OPERATING PROCEDURE	INTER- CHANGE- ABILITY	WEIGHT OR WEIGHT & BALANCE	TOOLS & SUPPORT EQUIPMENT	MAINTENANCE PROCEDURE	SERVICE LIFE	FLIGHT MANUAL	MAINTENANCE MANUAL	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
EST. MAN/HRS. REQ'D. TO ACCOMPLISH CHANGE IN FIELD											
SOURCE OF PARTS FOR KIT				AVAILABILITY _____ WEEKS AFTER APPROVAL							
NOT APPLICABLE											
DISPOSITION OF SPARES AFFECT											
NOT APPLICABLE											
INITIATED BY:				APPROVED:							
ADP Approved For Release 2001/06/09 : CIA-RDP69B00279R000100110001-2				STATINTL							

NATURE OF PROPOSAL:

This ECP covers the activities required to furnish the following systems:

Phase I

A. JC-130 Command Transmitter

1. Prototype Kit

This includes the design, manufacture and installation of Kit in JC-130B.

2. Kits (9)

Covers the manufacture and assembly of nine (9) kits.

3. Furnish ten (10) sets of transmitters, amplifiers, coax switches, cabling, etc.

4. Furnish five (5) sets (approx. 50% spares) for item 3 above.

B. Recovery Parachute

1. Procure fifty (50) parachutes including reef cutters.

2. Manufacture and deliver ten (10) test hatches.

PHASE II

A. Pickup and Stabilization Chutes

1. Furnish fifty (50) additional Pickup and Stabilization Chutes.

B. Replacement Rigging Chutes

1. Provide approx. fifteen (15) additional Pickup, Stabilization and Main Chutes used for rigging tests.

C. Limited repair and overhaul of Chutes used during tests.

FUNDING:

PHASE I

Budgetary Target Price
Budgetary Ceiling Price

PHASE II

Budgetary Target Price
Budgetary Ceiling Price

TOTAL CEILING PRICE



STATINTL






LOCKHEED - CALIFORNIA COMPANY		ENGINEERING STUDY <input type="checkbox"/>		LAC 22-57	
		CHANGE PROPOSAL <input checked="" type="checkbox"/>			
DATE 16 June 1965		AFFECTS: WSPO <input checked="" type="checkbox"/>		PROJECT <input checked="" type="checkbox"/>	
NAME OF MAJOR COMPONENT		PART OR LOWEST SUBASSEMBLY		PART NO. & MODEL OR TYPE	
TITLE OF PROPOSAL : HYDRAULIC REWORK - TEB CAN					
NATURE OF PROPOSAL : This ECP provides kits necessary to re-route outboard elevon hydraulic lines. This change is required due to changed location of the TEB Can by the Engine Contractor. This change is required on all A-12 and YF-12A Aircraft.					
REASON FOR PROPOSAL : Interference of hydraulic lines with TEB Can. Engineering required will be accomplished under Contract FT-21. Installation of kits will be accomplished under Contracts FT-21 and/or SC-23 as applicable.					
ES		ESTIMATED COST AND TIME INVOLVED : ADDITIONAL FUNDING REQUIRED :			
CP		ESTIMATED COST FOR KITS OR PARTS : ADDITIONAL FUNDING REQUIRED : Budgetary Estimate \$6,500			
ITEMS AFFECTED BY PROPOSAL :					
SAFETY <input type="checkbox"/>	MISSION EFFEC- TIVENESS <input type="checkbox"/>	PERFORM- ANCE <input type="checkbox"/>	OPERATING PROCEDURE <input type="checkbox"/>	INTER- CHANGE ABILITY <input type="checkbox"/>	WEIGHT OR WEIGHT & BALANCE <input type="checkbox"/>
TOOLS & SUPPORT EQUIPMENT <input type="checkbox"/>	MAINTENANCE PROCEDURE <input type="checkbox"/>	SERVICE LIFE <input type="checkbox"/>	FLIGHT MANUAL <input type="checkbox"/>	MAINTENANCE MANUAL <input type="checkbox"/>	
EST. MAN/HRS. REQ'D. TO ACCOMPLISH CHANGE IN FIELD					
SOURCE OF PARTS FOR KIT SERVICE BULLETIN 262 - YF-12A SERVICE BULLETIN 673 - A-12			AVAILABILITY _____ WEEKS AFTER APPROVAL		
DISPOSITION OF SPARES AFFECTED NOT APPLICABLE					
INITIATED BY : ADP			APPROVED : WSPO J.C.L.		

STATINTL

LOCKHEED-CALIFORNIA COMPANY		ENGINEERING STUDY <input type="checkbox"/>		LAC 22-68						
		CHANGE PROPOSAL <input checked="" type="checkbox"/>								
DATE 28 April 1965		AFFECTS: WSPO <input type="checkbox"/>		PROJECT <input checked="" type="checkbox"/>						
NAME OF MAJOR COMPONENT		PART OR LOWEST SUBASSEMBLY		PART NO. & MODEL OR TYPE						
TITLE OF PROPOSAL : RETROFIT OF PRODUCTION ADP INLET CONTROL INTO S/N's 134 & 135										
NATURE OF PROPOSAL : This ECP consists of all engineering, production of kits, and subsequent installation effort required to outfit S/N's 134 & 135 with the production ADP Inlet Control System. Budgetary estimate for this program is as follows: <div style="display: flex; justify-content: space-around;"> <div> Engineering Production of Kits Installation Spares & AGE </div> <div style="background-color: black; width: 100px; height: 100px;"></div> <div> STATINTL </div> </div>										
Note: This installation will include a spike and forward by-pass door position indicating system.										
REASON FOR PROPOSAL : Verbal request from Col. Geary to Kelly on 19 March 1965; we are proceeding with this job as directed.										
ES ESTIMATED COST AND TIME INVOLVED : ADDITIONAL FUNDING REQUIRED :										
CP ESTIMATED COST FOR KITS OR PARTS : Budgetary Estimate for Total Program \$680,000 ADDITIONAL FUNDING REQUIRED :										
ITEMS AFFECTED BY PROPOSAL :										
SAFETY	MISSION EFFEC-TIVENESS	PERFORM-ANCE	OPERATING PROCEDURE	INTER-CHANGE-ABILITY	WEIGHT OR WEIGHT & BALANCE	TOOLS & SUPPORT EQUIPMENT	MAINTENANCE PROCEDURE	SERVICE LIFE	FLIGHT MANUAL	MAINTENANCE MANUAL
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
EST. MAN/HRS. REQ'D. TO ACCOMPLISH CHANGE IN FIELD										
SOURCE OF PARTS FOR KIT				AVAILABILITY _____ WEEKS AFTER APPROVAL						
SERVICE BULLETIN TO BE WRITTEN										
DISPOSITION OF SPARES AFFECTED										
STATINTL										
INITIATED BY : Approved For Release 2001/06/09 : CIA-RDP69B00279R000100110001-2 C.L.J.				APPROVED : [REDACTED] PROJECT [REDACTED]						

STATINTL

LOCKHEED - CALIFORNIA COMPANY		ENGINEERING STUDY <input type="checkbox"/>		LAC 22-48-1	
		CHANGE PROPOSAL <input checked="" type="checkbox"/>			
DATE 30 April 1965		AFFECTS: WSPO <input type="checkbox"/>		PROJECT <input checked="" type="checkbox"/>	
NAME OF MAJOR COMPONENT		PART OR LOWEST SUBASSEMBLY		PART NO. & MODEL OR TYPE	
TITLE OF PROPOSAL: RETROFIT OF PRODUCTION ADP INLET CONTROL INTO A-12'S					
<p>NATURE OF PROPOSAL:</p> <p>This ECP consists of all engineering, production of kits, and subsequent installation required to outfit eight (8) A-12's with the production ADP Inlet Control System. The S/N's applicable are 121, 122, 125-128, 130 and 132. S/N 130 has had the prototype ADP Inlet Control; this system will be used as spares to support S/N 129 and 131, which will continue to use the prototype system. This ECP does not include replacing the APX-46 with the Wilcox 914X-1 IFF (See ECP 22-43). Budgetary Estimate for this program is as follows:</p> <p>Engineering and Mfg. of Kits. [REDACTED] STATINTL Installation Spares and AGE</p> <p>This ECP will also cover spike and forward by-pass door position indicator for 121, 122, 124-132.</p>					
<p>REASON FOR PROPOSAL:</p> <p>This ECP is revised from 22-48 to indicate the latest ship coverage.</p> <p>Authorization for this ECP was given by the following Headquarters' messages:</p> <p>4 Ship go-ahead - Message #1761 dated 6 August 1964 6 Ship go-ahead - Message #2314 dated 17 August 1964 8 Ship go-ahead - Message #6811 dated 27 April 1965</p> <p>Engineering, manufacturing of kits, and installation are a part of the FY-65 A-12 modification program as defined in ADP Financial Report SP-7967. Spares and AGE are being provided under CT-22 Call Purchase Requests.</p>					
ES		ESTIMATED COST AND TIME INVOLVED:			
		ADDITIONAL FUNDING REQUIRED:			
CP		ESTIMATED COST FOR KITS OR PARTS: Budgetary Estimate for Total Program [REDACTED]			
		ADDITIONAL FUNDING REQUIRED: STATINTL			
ITEMS AFFECTED BY PROPOSAL:					
SAFETY	MISSION EFFECTIVENESS	PERFORMANCE	OPERATING PROCEDURE	INTERCHANGEABILITY	WEIGHT OR WEIGHT & BALANCE
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TOOLS & SUPPORT EQUIPMENT	MAINTENANCE PROCEDURE	SERVICE LIFE	FLIGHT MANUAL	MAINTENANCE MANUAL	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
EST. MAN/HRS. REQ'D. TO ACCOMPLISH CHANGE IN FIELD					
SOURCE OF PARTS FOR KIT			AVAILABILITY _____ WEEKS AFTER APPROVAL		
SERVICE BULLETINS 660, 759 & 760			INCORPORATION WILL BE ACCOMPLISHED UNDER THE FY-65 A-12 MODIFICATION PROGRAM.		
DISPOSITION OF SPARES AFFECTED: SPARES FROM S/N 130 WILL BE USED TO SUPPORT S/N 129 AND 131. HAMILTON STANDARD SPARES WILL BE SLOWLY PHASED OUT OF THE PROGRAM.					
INITIATED BY:			APPROVED: [REDACTED]		
LAC			Approved For Release 2001/06/09 : CIA-RDP69B00279R000100110001-2		

LOCKHEED-CALIFORNIA COMPANY		ENGINEERING STUDY <input type="checkbox"/>		LAC 22-69							
		CHANGE PROPOSAL <input checked="" type="checkbox"/>									
DATE 23 April 1965		AFFECTS: WSPO <input type="checkbox"/>		PROJECT <input checked="" type="checkbox"/>							
NAME OF MAJOR COMPONENT DRAG CHUTE		PART OR LOWEST SUBASSEMBLY		PART NO. & MODEL OR TYPE							
TITLE OF PROPOSAL : DRAG CHUTE IMPROVEMENTS											
<p>NATURE OF PROPOSAL :</p> <p>This ECP consists of the engineering and production of kits to incorporate drag chute improvements in all A-12 Articles (excluding 134 and 135). The improvements are in three areas, as follows:</p> <ol style="list-style-type: none"> 1. Drag Chute machinery 2. Electrical actuator 3. Drag Chute doors <p style="text-align: right;">See page 2 for details.</p> <p>The engineering and production of kits will be accomplished under Contract FT-21. Installation of kits will be accomplished under Contracts FT-21 or SC-23 as applicable. All engineering and other non-recurring costs are being shared on a 50-50% basis between Contracts FT-21 and HA-3666.</p>											
<p>REASON FOR PROPOSAL :</p> <p>Headquarters request per wire #4956. Please also refer to letter from Kelly to John, dated 9 April 1965, same subject.</p> <p>Budgetary estimate for A-12 program is as follows:</p> <table border="0"> <tr> <td>Engineering Mfg. of Kits</td> <td rowspan="3"></td> <td rowspan="3">STATINTL</td> </tr> <tr> <td>Installation</td> </tr> <tr> <td>Spares</td> </tr> </table>						Engineering Mfg. of Kits		STATINTL	Installation	Spares	
Engineering Mfg. of Kits		STATINTL									
Installation											
Spares											
ES	ESTIMATED COST AND TIME INVOLVED :										
	ADDITIONAL FUNDING REQUIRED :										
CP	ESTIMATED COST FOR KITS OR PARTS : Budgetary Estimate for Total A-12 Program \$203,000										
	ADDITIONAL FUNDING REQUIRED :										
ITEMS AFFECTED BY PROPOSAL :											
SAFETY	MISSION EFFEC- TIVENESS	PERFORM- ANCE	OPERATING PROCEDURE	INTER- CHANGE- ABILITY	WEIGHT OR WEIGHT & BALANCE	TOOLS & SUPPORT EQUIPMENT	MAINTENANCE PROCEDURE	SERVICE LIFE	FLIGHT MANUAL	MAINTENANCE MANUAL	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
EST. MAN/HRS. REQ'D. TO ACCOMPLISH CHANGE IN FIELD											
SOURCE OF PARTS FOR KIT						AVAILABILITY <u>12-15</u> WEEKS AFTER APPROVAL					
SERVICE BULLETIN TO BE WRITTEN											
DISPOSITION OF SPARES AFFECTED						Old Actuators will be Cannibalized to some extent. Sufficient old Actuators will be left in the system to support the YF-12A's and M-21's.					
INITIATED BY :						APPROVED :					
Approved For Release 2001/06/09 : CIA-RDP69B00279R000100110001-2						 					

NATURE OF PROPOSAL (Continued from page 1)

1. The drag chute hook lock support will be revised to reduce friction and improve jettisoning capability at higher speeds. The drag chute hook and link will be changed to a "roller" configuration; the roller configuration eliminates the spherical contact which presently exists between the ball and the hook. This spherical surface has proved to be difficult to inspect and maintain. An external indicator system will be adopted in order to provide a visual assurance that the hook and ball are in the proper position after the chute packing operation is completed.
2. The actuator will be revised from a single electrical screw jack with a stall load of 300 - 400 lbs., to a dual electrical actuator with an "impact wrench" mode so as to have a peak capability of approximately 2,000 lbs. This load is more than enough to operate the system even when the forces are unusually high, either in the deployment or jettison mode. Each electric motor is energized by a separate electrical circuit which extends all the way to the cockpit, and each half of the dual actuator has the ability to perform all required functions in case of malfunction of the other. A single handle is used to energize both halves of the dual actuator. Both circuits will be individually checked as a part of the pre-flight check-out.
3. The drag chute door mechanism will be revised to minimize friction by installing bronze guide rollers, bushed links. We will also shorten the main actuating rod to minimize the effects of bending due to heat. We will reverse the direction of the door*swing to prevent any aerodynamic scooping effect in the event that it may not be rigged in a completely closed position.

*(This refers to the "latching" door - not the drag chute door).

OSA 1635-65

5 April 1965

To: Rus

Subject: ECP's for the Lockheed Inlet Control and Hydrogen Ignition Systems for the YF-12A, Contract CT-22

Dear Rus:

We are considering the installation of the Lockheed Inlet Control in lieu of the Hamilton-Standard in the YF-12A aircraft. Accordingly, we request that ADP prepare an Engineering Change Proposal for Contract CT-22 to provide this feature in all three YF-12A's on an expedited basis. In addition to the normal ECP information, the proposal should also include the following:

- a. List of main differences between the two control systems with your comments on the advantages or disadvantages of making the change on the YF-12A.
- b. Cost breakdown showing engineering, kit, and installation costs separately.
- c. Schedules for kit delivery and installation based on time from approval of the ECP. (Assume go-ahead prior to 1 July 1965).
- d. Installation man hours and calendar days downtime required for installation for each aircraft.

You are also authorized to submit an ECP for installation of hydrogen ignition systems on all three YF-12A's. The same type of information is desired on this ECP also.

These ECP's should be proposed for the support contract only. This letter does not authorize any effort beyond that required to submit the ECP's and provide the information requested. Your early response is requested.

Regards,

Ed R.

STATINTL

LOCKHEED-CALIFORNIA COMPANY		ENGINEERING STUDY <input type="checkbox"/>		LAC 22-63-1							
		CHANGE PROPOSAL <input checked="" type="checkbox"/>									
DATE 26 April 1965		AFFECTS: WSPO <input type="checkbox"/>		PROJECT <input checked="" type="checkbox"/>							
NAME OF MAJOR COMPONENT		PART OR LOWEST SUBASSEMBLY		PART NO. & MODEL OR TYPE							
TITLE OF PROPOSAL : FUEL COOLING SYSTEM											
NATURE OF PROPOSAL : SEE PAGE 2 NOTE: TMU-4/E;s, F-6's, and GN ₂ Trailers would be GFP to ADP.											
REASON FOR PROPOSAL : 1. PROVIDE ADDITIONAL RANGE CAPABILITY FOR THE A-12 2. THIS REVISION REPRESENTS A DIFFERENT APPROACH THAN PRESENTED IN THE BASIC ECP 22-63 AND SUPERSEDES IT IN ENTIRETY. <i>10/ each, 12 may 65</i>											
ES	ESTIMATED COST AND TIME INVOLVED : ADDITIONAL FUNDING REQUIRED :										
CP	ESTIMATED COST FOR KITS OR PARTS : Budgetary Estimate Item 1. \$40,000 ADDITIONAL FUNDING REQUIRED : 2. \$135,000										
ITEMS AFFECTED BY PROPOSAL :											
SAFETY	MISSION EFFEC- TIVENESS	PERFORM- ANCE	OPERATING PROCEDURE	INTER- CHANGE- ABILITY	WEIGHT OR WEIGHT & BALANCE	TOOLS & SUPPORT EQUIPMENT	MAINTE- NANCE PROCEDURE	SERVICE LIFE	FLIGHT MANUAL	MAINTE- NANCE MANUAL	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
EST. MAN/HRS. REQ'D. TO ACCOMPLISH CHANGE IN FIELD											
SOURCE OF PARTS FOR KIT N/A						AVAILABILITY _____ WEEKS AFTER APPROVAL					
DISPOSITION OF SPARES AFFECTED N/A						STATINTL					
INITIATED BY : Approved For Release 2001/06/09 : CIA-RDP69B00279R000100110001-2 LAC						APPROVED : PROJECT					

NATURE OF PROPOSAL:

STATINTL

1. Fuel Cooling System for [REDACTED]

This system consists of a mobile fuel chiller capable of cooling 25,000 gallons of fuel from 80°F to 15°F in twenty-four hours, used in conjunction with four TMU-4/E insulated tanks. The TMU-4/E's are GFP and must be modified to provide for safe bottom loading. We will also provide the necessary fuel and nitrogen manifolds, as indicated on block diagram #1 of TAG 1212 drawing, to couple the chiller fuel tank and nitrogen tank.

The TMU-4/E's are semi-mobile in that the ones presently available do not have wheels mounted on them. These tanks do not have their own pumps, filters, etc., and must be located near such facilities. Each TMU-4/E has a capacity of 6,500 gallons.

2. Fuel Cooling System for Deployment Base(s):

This system consists of a fuel chiller unit, as described above, used in conjunction with the five F-6 semi-trailers. The F-6's have a capacity of 5,000 gallons, contain their own pumps, filters and hoses, which make them ideal for a deployment base. We would modify these F-6's to provide for safe bottom loading; revise plumbing to permit circulation of fuel during the cooling cycle, and insulate them with three inches of foam, and weather proof them. We would provide the fuel and nitrogen manifolds to couple the chiller, fuel tank and nitrogen tank.*

We propose to provide two of the above described systems in order to provide for both A-12's and KC-135's. One complete chilling system (incl. the five F-6's, etc.) is sufficient to fuel two A-12 airplanes for simultaneous take-off. The second chilling system is sufficient to fuel two KC-135 tankers so that either one can off-load 70,000 lbs. of chilled fuel into the A-12 on the out-bound mission leg.

*(Please refer to block diagram #2)

LOCKHEED-CALIFORNIA COMPANY		ENGINEERING STUDY <input type="checkbox"/>		LAC 22-63						
		CHANGE PROPOSAL <input checked="" type="checkbox"/>								
DATE 25 September 1964		AFFECTS: WSPO <input type="checkbox"/>		PROJECT <input checked="" type="checkbox"/>						
NAME OF MAJOR COMPONENT		PART OR LOWEST SUBASSEMBLY		PART NO. & MODEL OR TYPE						
TITLE OF PROPOSAL : FUEL COOLER										
<p>NATURE OF PROPOSAL :</p> <p>This ECP is for the Design, Development and Production of two (2) Fuel Coolers. The Cooler will be a Trailer mounted 25 ton, Freon, Refrigeration system. This is sufficient cooling capacity to lower the temperature of a 25,000 gallon fuel tank from 80°F to 15°F in a 24 hour period during the summer months when average air temperature is 100°F.</p> <p>Ref: Letter, C. L. Johnson to J. Parangosky, dated 5 October 1964.</p>										
<p>REASON FOR PROPOSAL :</p> <p>The cooler fuel temperature will allow the Article to carry approximately 2,000 pounds additional fuel and gain an increased heat sink capability.</p>										
ES		ESTIMATED COST AND TIME INVOLVED :								
		ADDITIONAL FUNDING REQUIRED :								
CP		ESTIMATED COST FOR KITS OR PARTS : Budgetary Target Price \$53,931								
		(See Page 2)								
		ADDITIONAL FUNDING REQUIRED :								
ITEMS AFFECTED BY PROPOSAL :										
SAFETY	MISSION EFFEC-TIVENESS	PERFORM-ANCE	OPERATING PROCEDURE	INTER-CHANGE-ABILITY	WEIGHT OR WEIGHT & BALANCE	TOOLS & SUPPORT EQUIPMENT	MAINTENANCE PROCEDURE	SERVICE LIFE	FLIGHT MANUAL	MAINTENANCE MANUAL
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
EST. MAN/HRS. REQ'D. TO ACCOMPLISH CHANGE IN FIELD										
SOURCE OF PARTS FOR KIT						AVAILABILITY _____ WEEKS AFTER APPROVAL				
NOT APPLICABLE										
DISPOSITION OF SPARES AFFECTED										
NOT APPLICABLE						STATINTL				
INITIATED BY : Approved For Release 2001/06/09 : CIA-RDP69B00279R0						APPROVED : [REDACTED] 1-2 PROJECT				

STATINTL

Approved For Release 2001/06/09 : CIA-RDP69B00279R000100110001-2

Approved For Release 2001/06/09 : CIA-RDP69B00279R000100110001-2

FORM 1207 USE PREVIOUS EDITIONS

CLASSIFIED MESSAGE

ROUTING

DATE 1450Z 27 OCT 64

S E C R E T

1	CD	9
2	"	10
3	NO	11
4	"	12
5	ORINT	13
6	"	14
7	"	15
8	RB	16

ROUTINE

IN 54552

TO : DIRECTOR

FROM : [REDACTED]

ACTION:

INFO :

TOR 1530Z 27 OCT 64

OSA1-15

TO

25X1A

INFO

CITE

25X1A

KEDLOCK

SUBJECT: ECP LAC 22-62 SEAT & PARACHUTE REWORK

1. SUBJECT ECP HAS BEEN REVIEWED AND IS APPROVED. SEAT MODIFICATION AND THE NEW SINGLE PARATIMER WILL BE COVERED UNDER CONTRACT FT-21 PRESENT FUNDING AND THE NEW CATAPULTS AND DUAL PARATIMERS UNDER CONTRACT CT-22 PRESENT FUNDING. SUBJECT ECP IS NOT SPECIFIC AS TO WHAT COVERED IN SEAT MOD OTHER THAN NEW CATAPULT. THE NEW VENT BRACKET AND VENT DISCONNECT SHOULD BE INCLUDED DURING THIS MOD TURN-AROUND.

2. CONTRACT NEGOTIATION SCHEDULED AT [REDACTED] 12 & 13 NOV 64 FOR 24 NEW PARACHUTES. PROPOSED DELIVERY SCHEDULES OF THESE NEW CHUTES WILL PROVIDE SUFFICIENT FOR COVERAGE WHILE THE NINE CHUTES INVOLVED HERE ARE TURNED AROUND. THE NINE CHUTE TURN AROUND COULD BE HANDLED AS AN ADDITIONAL ITEM TO THIS CONTRACT. ACTUAL TURN AROUND WOULD NOT BE SCHEDULED UNTIL APPROX MAR 65.

3. FOR [REDACTED] ABOVE CHANGE CAUSED BY NEW HI ENERGY CATAPULT AND NON COMPATIBILITY WITH THE OLD CHUTE. THE NEW CATAPULT REQUIRES

S E C R E T

GROUP 1
EXCLUDED FROM AUTO
DOWNGRADING
AND DECLASSIFICATION

S E C R E T

25X1A

(IN 54552)

PAGE TWO

A C.G. SHIFT AFT WITH OLD CHUTE. BALLAST COULD BE USED TO SHIFT BUT SPACE LIMITATIONS WOULD MAKE THIS MARGINAL FROM A SAFETY STANDPOINT. TURN AROUND FOR THIS MOD WILL BE DELAYED TILL SPRING 65 WHEN OLD CATAPULTS DUE FOR TIME CHANGE.

25X1A

4. FOR [REDACTED] PLEASE FURNISH SCHEDULE FOR TURN AROUND BASED ON OLD CATAPULT REPLACEMENT DATES APPROX SPRING 65.

END OF MESSAGE

S E C R E T

LOCKHEED-CALIFORNIA COMPANY		ENGINEERING STUDY <input type="checkbox"/>		LAC 22-62							
		CHANGE PROPOSAL <input checked="" type="checkbox"/>									
DATE 24 SEPTEMBER 1964		AFFECTS: WSPO <input checked="" type="checkbox"/>		PROJECT <input type="checkbox"/>							
NAME OF MAJOR COMPONENT SEAT AND PARACHUTE		PART OR LOWEST SUBASSEMBLY		PART NO. & MODEL OR TYPE							
TITLE OF PROPOSAL : AF-12 SEAT AND PARACHUTE REWORK PROGRAM											
NATURE OF PROPOSAL : 1. Bring all AF-12 Seats back to LAC for Rework to accept the more powerful Catapult, developed under ECP 22-12-1, and other changes resulting from the Collins El Centro Test Program. 2. Send all AF-12 Parachutes back to Firewel for Rework to the lighter, thinner version developed under the Collins El Centro Test Program. The timers will be sent to LAC. LAC will scrap the timers saving all parts useable in the manufacture of the new timers.											
REASON FOR PROPOSAL : The above work will bring the AF-12 Seat and Parachute Equipment up to the latest configuration. (Please refer to letter, Rus to Temp. dated 2 October 1964)											
ES	ESTIMATED COST AND TIME INVOLVED :										
	ADDITIONAL FUNDING REQUIRED :										
CP	ESTIMATED COST FOR KITS OR PARTS : NO COST APPLICABLE TO THIS ECP										
	ADDITIONAL FUNDING REQUIRED : SEE PAGE 2 Est. of Related Program Costs \$53,150										
ITEMS AFFECTED BY PROPOSAL :											
SAFETY	MISSION EFFEC- TIVENESS	PERFORM- ANCE	OPERATING PROCEDURE	INTER- CHANGE- ABILITY	WEIGHT OR WEIGHT & BALANCE	TOOLS & SUPPORT EQUIPMENT	MAINTENANCE PROCEDURE	SERVICE LIFE	FLIGHT MANUAL	MAINTENANCE MANUAL	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
EST. MAN/HRS. REQ'D. TO ACCOMPLISH CHANGE IN FIELD											
SOURCE OF PARTS FOR KIT						AVAILABILITY _____ WEEKS AFTER APPROVAL					
SERVICE BULLETINS TO BE WRITTEN											
DISPOSITION OF SPARES AFFECTED											
SPARES WILL BE REWORKED IN SO FAR AS POSSIBLE											
INITIATED BY :						APPROVED : WSPO					
Approved For Release 2001/06/09 : CIA-RDP69B00279R0001						STATINTL					

ECP 22-62
Page 2 of 2

COSTS:

Seat modification will be accomplished under Contract FT-21, Repair and Overhaul Section. Budgetary estimate is \$1,500 per Seat or \$9,000 total.

New Catapults for the seats are being provided under Contract CT-22, Call Section, FY '64 Purchase Request 385. Budgetary estimate is \$1,100 per Catapult or \$6,600 total.

The Parachute Rework will be accomplished by Firewel under their own Prime Contract.

The new Single Timer will be provided under Contract FT-21, Repair and Overhaul Section. Budgetary estimate is \$700 per Timer or \$6,300 total.

The new Dual Timers will be procured Under Contract CT-22, Call Section. Parts salvageable from old single timers will be used to every extent possible in reducing the price of these timers. Budgetary estimate is \$1,250 per Dual Timer, or \$11,250 total.

SECRET
OXCART

OXC-8480-65

Copy 5 of 10

14 April 1965

MEMORANDUM FOR : Deputy for Field Activities/OSA

SUBJECT : Pre-cooled Fuel

Attached herewith is a memorandum on a Lockheed proposal to pre-cool fuel for the A-12 aircraft. As noted, it is recommended by D/TECH that this capability be developed in order to provide an additional potential increment of range. It is requested that the attached memorandum be reviewed with comments and recommendations submitted to D/TECH/OSA by 23 April.

AND/OSA

25X1A

Attachment: OXC-8490-65

AND/OSA/ [REDACTED] (14 April 1965)

Distribution:

- Cy 1 - D/FA/OSA**
- 2 - D/TECH/OSA**
- 3 - OXC/FA/OSA**
- 4 - MD/OSA**
- 5 - CD/OSA**
- 6&7 - AND/OSA**
- 8 - PE/OSA**
- 9 - chfoso**
- 10 - RB/OSA**

OXCART
SECRET

SECRET
OXCAIT

OXC-8490-65
Copy 5 of 10

14 April 1966

MEMORANDUM FOR THE RECORD

SUBJECT : Pre-cooled Fuel

1. Lockheed has submitted ECP 22-63 for the design, development and production of two Fuel Coolers. This cooler would have the capacity to lower the temperature of a 25,000 gallon fuel tank from 80° F to 15° F in 24 hours when the average air temperature is 100° F. Lockheed has estimated that the cooler fuel temperature will allow the A-12 to carry approximately 2000 pounds additional fuel. The cost of the two coolers is estimated to be \$53,931. The unit would be powered by 440 volt 3 phase current which could be supplied by either plugging into a 100 amp service plug or into an MA-1 Motor generator trailer. The cooling unit would be approximately 20 feet long and would be sized to be air lifted by a C-130. As indicated in the attachment II messages, this ECP does not provide for field tankage installation and costs.

2. The LAC estimate of +2000 pounds fuel is based on a fuel weight of 6.6 lbs./gal. at 15° F and upon on-loading approximately 68,500 pounds fuel. However, as noted in the technical attachment I, the fuel weight at 15° F is 6.55 pounds/gal. and 55,000-60,000 pounds are transferred. Consequently the increased fuel quantity is approximately 1350 pounds.

3. The ground rules for a refueling mission require that the tanker be at ARCP one hour before refueling. The minimum tanker flight time to the refueling point is approximately 1½ hours based on mission planning of OXC/PA/OSA. Forty-five minutes are required to fuel a tanker based on MB/OSA data and it is estimated that the aircraft would take-off approximately one hour after refueling. Therefore, the tanker data noted in the technical attachment I are valid and consequently, approximately 1350 pounds additional fuel can be on-loaded due to the temperature differential of 45° F to 8° F.

OXCAIT

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OXICART

OXIC-8490-68

4. The net increase in range due to the additional 1350 pounds fuel is +45 n.m. Although this is admittedly a small increase in overall range, it is attainable without any modifications to the basic aircraft. In order that this increased capability be provided, it is therefore recommended that ECP 22-63 be approved after it has been amended to increase the quantity to three fuel coolers. Since one cooler will cool sufficient fuel for approximately three tankers, the capability should be provided for a mission cancellation and a rescheduling within 24 hours or less, as well as one spare system. This obviously assumes that this increased capability is limited to the target leg of any mission. Further, it is recommended that this system be tested in the tanker/A-12 combination [REDACTED] by the DCM prior to any deployment.

25X1A

[REDACTED]
ASD/OSA

25X1A

Attachments: I and II

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OX CART

Att. I to
OXC-2490-65

TECHNICAL ATTACHMENT I

Basic Data:

A. Results of KC-135 data:

1. Fuel loaded in tanker at fuel temperature of 15° F exits refueling boom at 8° F after 4½ hours.
2. Fuel loaded in tanker at fuel temperature of 85° F exits refueling boom at 45° F after 4½ hours.

B. Weight of fuel on-loaded - 55,000 - 60,000 lbs.

C. Minimum time from end of fueling B-52 to start of refueling - 3½ hours.

- D.**
1. Fuel weight @ 60° F - 6.4 lbs./gal.
 2. Fuel weight @ 15° F - 6.55 lbs./gal.
 3. Fuel weight @ 45° F - 6.44 lbs./gal.
 4. Fuel weight @ 8° F - 6.59 lbs./gal.

Calculations:

**A. LAC assumes temperature reduction from 60° F - 15° F:
For 55,000 lb. on-load,**

$$\Delta \text{Fuel} = \frac{6.55}{6.4} (55,000) - 55,000 = 1300 \text{ lbs.}$$

For 60,000 lb. on-load,

$$\Delta \text{Fuel} = \frac{6.55}{6.4} (60,000) - 60,000 = 1400 \text{ lbs.}$$

**B. For actual variation of 45° F - 8° F:
For 55,000 lbs. on-load,**

$$\Delta \text{Fuel} = \frac{6.59}{6.4} (55,000) - \frac{6.44}{6.4} (55,000) = 1300 \text{ lbs.}$$

OX CART
SECRET

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ONCART

Att. I to
OXC-8490-65

For 60,000 lb. onload,

$$\text{Fuel} = \frac{6.59}{6.4} (60,000) - \frac{6.44}{6.4} (60,000) = 1400 \text{ lbs.}$$

C. Range increment for + 1350 lbs. fuel:

Basic [REDACTED] data as follows used as base reference:

W - 119,700
Fuel - 67,500
Reserve - 7500
Range - 2035 n.m. (less climb and descent)

W + 1350 - 121,050
Fuel - 68,850
Reserve - 7,500
Range - 2080 n.m.
 ΔR - + 45 n.m.

25X1A

ONCART
SECRET

FORM 120
5-63 EDITIONS

CLASSIFIED MESSAGE

DATE 2327Z 22 MAR 65

TOP SECRET

Att. II to
OXC-8490-65

TO : DIRECTOR

FROM :

ACTION:

INFO :

TOR: 2332Z 22 MAR 65

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PRIORITY

Arthur M. D.
on Rep
OSA 1-15
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IN 78058

TO PRIORITY

INFO

CITE

25X1A

OXCART

REF:

WE WILL BE UNABLE TO OBTAIN A TITAN II FUEL TRUCK, THEREFORE IT WILL BE NECESSARY TO BUY AND INSTALL AN ALUMINUM TANK FOR THE PRE-COOLED FUEL TEST. TANK AND INSTALLATION COSTS WILL BE APPROXIMATELY 10,000 DOLLARS PLUS THE 53,000 DOLLARS FOR ECP 22-63. IF YOU THINK THE SMALL RANGE INCREASE WHICH MAY BE OBTAINED BY USING PRE-COOLED FUEL IS WORTH THE COST, PLEASE INFORM US SO THAT WE CAN TAKE ACTION TO OBTAIN THE ALUMINUM TANK.

END OF MESSAGE

TOP SECRET

GROUP 1
EXCLUDED FROM AUTO-
MATIC DOWNGRADING
AND DECLASSIFICATION

DATE 2311Z 17 MAR 65

TOP SECRET

Att. II to
OXC-8490-65

TO : DIRECTOR

25X1A
FROM : [REDACTED]

ACTION:

INFO :

*Action
ROD, GWC*

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PRIORITY

TOR: 0003Z 18 MAR 65

IN 77365

25X1A

TO PRIORITY [REDACTED] INFO

CITE [REDACTED]

25X1A

25X1A OXCART [REDACTED]

25X1A REF: [REDACTED]

1. WE THINK PRE-COOLED FUEL (SPECIFIC WEIGHT 6.6 POUNDS PER GALLON) MAY INCREASE RANGE APPROXIMATELY 50 NAUTICAL MILES RATHER THAN 100 TO 120 AS INDICATED IN YOUR MESSAGE. OUR FIGURE IS BASED ON CARRYING THE ADDITIONAL 2,000 POUNDS OF FUEL FROM TAKEOFF TO END OF NORMAL CRUISE, RATHER THAN ADDING THE FUEL INCREASE AT THE END OF NORMAL CRUISE. WE THINK YOUR FIGURES MAY REPRESENT THE LATTER SITUATION. ADDITIONALLY, WE DO NOT KNOW HOW MUCH THE 2,000 POUND WEIGHT INCREASE WILL DEGRADE TRANSONIC ACCELERATION AND THEREBY THE EFFECTIVE RANGE INCREASE ATTRIBUTABLE TO PRE-COOLED FUEL. SINCE THE RANGE INCREASE WILL BE SMALL NO MATTER WHOSE FIGURES ARE USED, IT WILL BE NECESSARY TO PRE-COOL KC-135 TANKER OFF-LOAD FUEL IF THIS PROGRAM IS TO HAVE ANY OPERATIONAL SIGNIFICANCE.

2. WE AGREE THAT LAC'S PROPOSAL FOR PRE-COOLING FUEL (ECP 22-63) IS SATISFACTORY; HOWEVER, WE DO NOT WANT TO USE OUR UNDERGROUND STORAGE TANKS AS THEY SUGGEST. THIS PARTICULAR AREA IS NOW USED

TOP SECRET

GROUP 1
EXCLUDED FROM AUTO-
MATIC DOWNGRADING
AND DECLASSIFICATION

TOP SECRET

25X1A

(IN 77365) PAGE TWO

FOR AIRCRAFT ENGINE CHECKOUTS AND IS OVER A MILE FROM OUR HANGAR. WE ARE DETERMINING AVAILABILITY OF 15,000 GALLON TANKER TRAILER VEHICLES USED TO FUEL TITAN II MISSILES. THESE VEHICLES WOULD BE IDEALLY SUITED FOR OUR TEST SINCE THEY ARE INSULATED AND HAVE A NITROGEN PURGE SYSTEM. IF WE CANNOT OBTAIN THESE VEHICLES, WE WILL BUILD A SMALL STORAGE TANK (APPROX 20,000 GAL) ADJACENT TO OUR HANGARS. WE RECOMMEND THAT YOU HAVE LAC PROCEED WITH CONSTRUCTION OF THE FUEL COOLER (ECP 22-63) AND WE WILL CONNECT THESE UNITS TO OUR VEHICLE/ STORAGE TANK. WE RECOMMEND THAT LAC CONSTRUCT THE FUEL COOLERS SINCE THEIR PRICE ESTIMATE IS LESS THAN OURS IF WE WERE TO CONSTRUCT THEM

25X1A

3. WE RECOMMEND THAT YOU CHECK WITH USAF AND DETERMINE WHETHER FUEL TEMPERATURE INFORMATION IS AVAILABLE FOR KC-135 BODY TANKS. THIS FUEL MUST REMAIN COLD UP TO OFF LOAD TIME IF WE ARE TO DERIVE ANY BENEFIT FROM THIS PROGRAM. A SECOND APPROACH TO THE TANKER PROBLEM COULD BE TO RE-EXAMINE USE OF KC-135 WING TANK FUEL FOR OFF-LOAD. IN ANY EVENT, WE WOULD WANT TO CONDUCT KC-135 TESTS HERE TO DETERMINE FUEL TEMPERATURE AT OFF LOAD TIME. THE MINIMUM TIME BETWEEN KC-135 PF-1 FUEL GROUND SERVICING TO OFF LOAD TIME VARIED BETWEEN ONE AND ONE HALF HOURS TO FOUR AND ONE HALF HOURS FOR THE SKYLARK OPERATION. WE THINK THESE TIME ESTIMATES ARE REASONABLE FOR ANY FORESEEABLE OPERATIONAL COMMITMENT, THEREFORE THE FUEL MUST REMAIN COLD UP TO FOUR AND ONE HALF HOURS.

TOP SECRET

TOP SECRET

25X1A [REDACTED] (IN 77365) PAGE THREE

4. REFERENCE QUESTIONS IN PARAGRAPH 2 OF YOUR MESSAGE:

A. USE LAC CONSTRUCTED FUEL COOLERS ATTACHED TO OUR VEHICLE OR TANK TO PRE-COOL FUEL.

B. PRE-COOLED FUEL WOULD BE REQUIRED AT A-12 AND TANKER LOCATIONS AND IN SUFFICIENT QUANTITY TO SERVICE ALL AIRCRAFT IMMEDIATELY PRIOR TO FLIGHT.

C. LAC ECP 22-53 COST ESTIMATE IS 53,931 DOLLARS AND A 20,000 GALLON STORAGE TANK [REDACTED] IS 10,000 DOLLARS. THE 10,000 DOLLAR EXPENDITURE WILL NOT BE NECESSARY IF WE ARE SUCCESSFUL IN OBTAINING THE TITAL II FUEL SERVICING VEHICLES.

5. LAC ESTIMATED 3 MONTHS FOR CONSTRUCTION OF THE FUEL COOLERS.

THIS IS SUFFICIENT TIME FOR US TO SET UP A STORAGE TANK [REDACTED]

END OF MESSAGE

TOP SECRET

25X1A
 ORIC: [REDACTED]
 UNIT: ASD/OSA
 EXT: 5041
 DATE: 2 MARCH 1965

SECRET

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2	ASD/OSA	16	MD/OSA
3	D/TECH/OSA	17	OXC/OSA
4	AD/OSA	18	D/EA/OSA
5	SS/OSA	Att. II to OXC-8490-65	
6	MD/OSA		
7	OXC/OSA		
8	D/EA/OSA		
PRIORITY	DEFERRED	PRIORITY	INITIALS
	X ROUTINE	OPERATIONAL IMMEDIATE	INITIALS

TO: [REDACTED] 25X1A
 FROM: DIRECTOR
 CONF: [REDACTED]
 INFO: [REDACTED]

4932A
 05A 1-15

TO: [REDACTED] INFO: [REDACTED] CITE: [REDACTED]
 25X1A
 25X1A OXCART/ [REDACTED] 25X1A
 25X1A FOR [REDACTED] 25X1A

1. AT 15 JANUARY SUPPLIERS MEETING SUBJECT DISCUSSED OF PRE-COOLING A-12 FUEL TO PLUS FIFTEEN DEGREES FARENHEIT IN ORDER TO INCREASE SPECIFIC WEIGHT FROM 6.4 POUNDS PER GALLON TO 6.6 POUNDS PER GALLON. CURRENT ESTIMATES INDICATE THIS WOULD INCREASE RANGE FROM 100 TO 120 NAUTICAL MILES.

2. REQUEST YOUR INVESTIGATION AND COMMENTS AS TO BEST FEASIBLE SCHEME FOR PRE-COOLING A-12 FUEL IN ORDER TO TAKE ADVANTAGE OF ABOVE RANGE IMPROVEMENT. THIS SHOULD INCLUDE HOW IT SHOULD BE DONE; WHERE IT SHOULD BE DONE., E.G., [REDACTED] PRIOR LOADING A-12?; AT TANKER BASE PRIOR LOADING TANKER?; STAGING FOR TANKER AND A-12?; HARDWARE LEAD TIMES AND COST INVOLVED FOR CAPABILITY TARGETED FOR MID-SUMMER.

END OF MESSAGE

COORD:
 SS/OSA [REDACTED]
 MD/OSA [REDACTED]
 OXC/OSA [REDACTED]
 D/TECH/OSA [REDACTED]

ASD/OSA

COORDINATING OFFICERS

SECRET

RELEASING OFFICER

GROUP 1
 Excluded from automatic
 downgrading and
 declassification

AUTHENTICATING OFFICER

LOCKHEED-CALIFORNIA COMPANY		ENGINEERING STUDY <input type="checkbox"/>		LAC 22-41							
		CHANGE PROPOSAL <input checked="" type="checkbox"/>									
DATE 28 January 1965		AFFECTS: WSPO <input checked="" type="checkbox"/>		PROJECT <input checked="" type="checkbox"/>							
NAME OF MAJOR COMPONENT		PART OR LOWEST SUBASSEMBLY		PART NO. & MODEL OR TYPE							
TITLE OF PROPOSAL : STALL WARNING SYSTEM											
<p>NATURE OF PROPOSAL:</p> <p>This ECP provides engineering design and the manufacture of kits for a Stall Warning System to be used on all A-12 and AF-12 Articles (S/N 121, 122, 124-132, 134, 135, 1001-1003).</p> <p>The transducer (stall warning) is located in the cockpit on S/N 121 and 124; the other A-12's have the transducer installed in the nose. The AF-12's will have the transducer installed in the front cockpit. Both A-12 and AF-12 installations provide a steady audible tone to alert the pilot to a stall condition (this ties into the existing pulsating tone system which warns the pilot of landing-gear-not-down condition). In addition to the audible tone, the A-12's have a red light mounted on the panic panel to indicate a stall condition.</p>											
<p>REASON FOR PROPOSAL :</p> <p>This system provides a positive warning of a low speed, high angle of attack condition which could lead to airplane stall. The need for a solution to this problem has been discussed many times with Headquarters and SPO personnel. We are proceeding with this job.</p>											
ES		ESTIMATED COST AND TIME INVOLVED :									
		ADDITIONAL FUNDING REQUIRED :									
CP		ESTIMATED COST FOR KITS OR PARTS : See Page 2.									
		ADDITIONAL FUNDING REQUIRED : Target Price \$54,404 Ceiling Price 59,943 Est. of Rel Program Costs 43,297 Est. Total Program Costs \$103,240									
ITEMS AFFECTED BY PROPOSAL :											
SAFETY	MISSION EFFEC- TIVENESS	PERFORM- ANCE	OPERATING PROCEDURE	INTER- CHANGE- ABILITY	WEIGHT OR WEIGHT & BALANCE	TOOLS & SUPPORT EQUIPMENT	MAINTENANCE PROCEDURE	SERVICE LIFE	FLIGHT MANUAL	MAINTENANCE MANUAL	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
EST. MAN/HRS. REQ'D. TO ACCOMPLISH CHANGE IN FIELD											
SOURCE OF PARTS FOR KIT						AVAILABILITY _____ WEEKS AFTER APPROVAL					
SERVICE BULLETINS 223, 224, & 612											
DISPOSITION OF SPARES AFFECTED											
NOT APPLICABLE											
INITIATED BY :						APPROVED : WSPO					
CLJ						Signed by Col. Sedford Signature J/Tech files					

STATINTL

Approved For Release 2001/06/09 : CIA-RDP69B00279R000100110001-2

Approved For Release 2001/06/09 : CIA-RDP69B00279R000100110001-2

LOCKHEED-CALIFORNIA COMPANY		ENGINEERING STUDY <input type="checkbox"/>		LAC -22-56						
		CHANGE PROPOSAL <input checked="" type="checkbox"/>								
DATE 14 January 1965		AFFECTS: WSPO <input type="checkbox"/>		PROJECT <input checked="" type="checkbox"/>						
NAME OF MAJOR COMPONENT		PART OR LOWEST SUBASSEMBLY		PART NO. & MODEL OR TYPE						
TITLE OF PROPOSAL : MEASUREMENT OF ROLL, PITCH & YAW										
<p>NATURE OF PROPOSAL :</p> <p>This ECP will provide a method of accurately determining airplane roll, pitch and yaw. A 70mm camera will be fixed to the structure of the airplane and will be run at the same time as the Type I or Type II system.</p> <p>This ECP includes the design and manufacture of one comparator system, development of the computer program required to analyze comparator data and five (5) data runs with Type I or Type II System.</p>										
<p>REASON FOR PROPOSAL :</p> <p>This ECP provides a method for checking the performance and quality of the airplane camera systems. For a more comprehensive description of this program please refer to the letter [REDACTED] to John Parangoosky, dated 3 September on the subject of A-12 optical Provisions. The pertinent part of the letter is attached to this ECP.</p>										
ESTIMATED COST AND TIME INVOLVED :										
ES ADDITIONAL FUNDING REQUIRED :										
ESTIMATED COST FOR KITS OR PARTS : Budgetary Target Price \$18,000										
CP Estimate of Related Progr. Costs 1,000										
ADDITIONAL FUNDING REQUIRED : Estimated Total Program Cost \$19,000										
ITEMS AFFECTED BY PROPOSAL :										
SAFETY	MISSION EFFECTIVENESS	PERFORMANCE	OPERATING PROCEDURE	INTER- CHANGE- ABILITY	WEIGHT OR WEIGHT & BALANCE	TOOLS & SUPPORT EQUIPMENT	MAINTENANCE PROCEDURE	SERVICE LIFE	FLIGHT MANUAL	MAINTENANCE MANUAL
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
EST. MAN/HRS. REQ'D. TO ACCOMPLISH CHANGE IN FIELD										
SOURCE OF PARTS FOR KIT N/A				AVAILABILITY 8 WEEKS AFTER APPROVAL						
DISPOSITION OF SPARES AFFECTED N/A										
INITIATED BY :				APPROVED :						
Approved For Release 2001/06/09 : CIA-RDP69B00279R000100110001-2				Signed by Col. Ledford PROJECT Manual Signature in Tech files						

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Approved For Release 2001/06/09 : CIA-RDP69B00279R000100110001-2

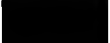
Approved For Release 2001/06/09 : CIA-RDP69B00279R000100110001-2

LOCKHEED -CALIFORNIA COMPANY		ENGINEERING STUDY <input type="checkbox"/>		LAC 22-54							
		CHANGE PROPOSAL <input checked="" type="checkbox"/>									
DATE 14 January 1965		AFFECTS: WSPO <input type="checkbox"/>		PROJECT <input checked="" type="checkbox"/>							
NAME OF MAJOR COMPONENT TYPE I CAMERA		PART OR LOWEST SUBASSEMBLY		PART NO. & MODEL OR TYPE							
TITLE OF PROPOSAL : MODIFICATIONS TO 121, 122 AND 131 FOR TYPE I CAMERA INSTALLATION											
<p>NATURE OF PROPOSAL:</p> <p>This ECP provides for engineering and manufacturing effort required to provide service bulletin kits for S/N 121, 122 and 131 to accept the Type I Camera. The kit will supply parts for the Q-Bay inner can which provides a sealed environment for the cameras.</p> <p>Installation of kits is not a part of this ECP.</p> <p>We are proceeding with this job.</p>											
<p>REASON FOR PROPOSAL :</p> <p>Headquarters message 2403 requests that all A-12 ships (excl. 123, 124, 133-135) be configured to accept both Type I and Type II cameras. This ECP provides all remaining parts required to comply with the request.</p> <p>We request that you reconsider outfitting S/N 121 with this capability since its present configuration does not make it feasible to carry the cameras. We will revise this ECP to reduce scope and cost if you concur with our suggestion.</p>											
ESTIMATED COST AND TIME INVOLVED :											
ADDITIONAL FUNDING REQUIRED :											
ES											
CP		ESTIMATED COST FOR KITS OR PARTS :									
		See Page 2.									
		ADDITIONAL FUNDING REQUIRED :									
		<p>Target Price \$19,284</p> <p>Ceiling Price 21,212</p> <p>Est. of Rel. Program Costs 6,000</p> <p>Est. Total Program Costs \$27,212</p>									
ITEMS AFFECTED BY PROPOSAL :											
SAFETY	MISSION EFFEC- TIVENESS	PERFORM- ANCE	OPERATING PROCEDURE	INTER- CHANGE- ABILITY	WEIGHT OR WEIGHT & BALANCE	TOOLS & SUPPORT EQUIPMENT	MAINTE- NANCE PROCEDURE	SERVICE LIFE	FLIGHT MANUAL	MAINTE- NANCE MANUAL	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
EST. MAN/HRS. REQ'D. TO ACCOMPLISH CHANGE IN FIELD											
SOURCE OF PARTS FOR KIT						AVAILABILITY _____ WEEKS AFTER APPROVAL					
SERVICE BULLETINS 647 AND 674											
DISPOSITION OF SPARES AFFECTED											
NOT APPLICABLE						STATINTL					
INITIATED BY :						APPROVED :					
PROJECT HEADQUARTERS						<p>signed by Col. Tedford</p> <p>Manual Signature is</p> <p>Dittzer</p>					

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Approved For Release 2001/06/09 : CIA-RDP69B00279R000100110001-2

Approved For Release 2001/06/09 : CIA-RDP69B00279R000100110001-2

LOCKHEED - CALIFORNIA COMPANY		ENGINEERING STUDY <input type="checkbox"/>		LAC 22-51	
		CHANGE PROPOSAL <input checked="" type="checkbox"/>			
DATE 15 January 1965		AFFECTS: WSPO <input type="checkbox"/>		PROJECT <input checked="" type="checkbox"/>	
NAME OF MAJOR COMPONENT		PART OR LOWEST SUBASSEMBLY		PART NO. & MODEL OR TYPE	
TITLE OF PROPOSAL : MODIFICATIONS TO ADP PROTOTYPE INLET CONTROL SYSTEM					
<p>NATURE OF PROPOSAL :</p> <p>This ECP is for the design, development and manufacture of components required to incorporate inlet control modification on S/N's 129, 130, and 131. These modifications consist of circuitry and sensor changes to the pressure ratio transducer and the computer to improve the inlet control system's ability to regulate spike and forward by-pass door positions. The changes include new, more accurate and more reliable mach sensors (R-12 production type). These sensors will require 80% less calibration time (200 hours reduced to 40 hours) once a year, instead of the monthly calibration currently required.</p> <p>We are making further changes to the pressure ratio transducer sensors due to movement of the sensing point closer to the engine. This change is being made on one (1) ship only. If this change in the sensing point improves our capability of detecting REASON FOR PROPOSAL shock expulsion substantially, we will propose further ship coverage.</p> <p>REASON FOR PROPOSAL:</p> <p>To improve the response of the ADP Prototype Inlet Control System to rapid rates of change in the angle of attack. This improvement will reduce the possibility of incurring unstart conditions, and to reduce maintenance and calibration time.</p> <p>We are proceeding with this job.</p>					
ES		ESTIMATED COST AND TIME INVOLVED :			
		ADDITIONAL FUNDING REQUIRED :			
CP		ESTIMATED COST FOR KITS OR PARTS :		Target Price \$87,854 Ceiling Price 96,630 Est. of Rel. Program Costs 2,500 Est. Total Program Costs \$99,139	
		See Page 2.			
		ADDITIONAL FUNDING REQUIRED :			
ITEMS AFFECTED BY PROPOSAL :					
SAFETY	MISSION EFFEC-TIVENESS	PERFORM-ANCE	OPERATING PROCEDURE	INTER-CHANGE-ABILITY	WEIGHT OR WEIGHT & BALANCE
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
EST. MAN/HRS. REQ'D. TO ACCOMPLISH CHANGE IN FIELD					
SOURCE OF PARTS FOR KIT			AVAILABILITY _____ WEEKS AFTER APPROVAL		
NOT APPLICABLE					
DISPOSITION OF SPARES AFFECTED					
NOT APPLICABLE					
INITIATED BY :			STATINTL		
LAC Approved For Release 2001/06/09 : CIA-RDP69B00279R000100110001-2			APPROVED :  Signed for by Col. Leland <i>(Handwritten signature)</i>		
			PROJECT <i>(Handwritten signature)</i>		

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Approved For Release 2001/06/09 : CIA-RDP69B00279R000100110001-2

Approved For Release 2001/06/09 : CIA-RDP69B00279R000100110001-2

LOCKHEED - CALIFORNIA COMPANY		ENGINEERING STUDY <input type="checkbox"/>		LAC 22-36	
		CHANGE PROPOSAL <input checked="" type="checkbox"/>			
DATE 2 December 1964		AFFECTS: WSPO <input checked="" type="checkbox"/>		PROJECT <input checked="" type="checkbox"/>	
NAME OF MAJOR COMPONENT		PART OR LOWEST SUBASSEMBLY		PART NO. & MODEL OR TYPE	
TITLE OF PROPOSAL : AIRPLANE CONTROL SYSTEM CHECKOUT CART					
<p>NATURE OF PROPOSAL : Design, develop and manufacture four carts to aid in the complete checkout of the airplane control system. Three of these carts will be stationed at [REDACTED] for use on the A-12 articles and the other cart will be stationed at EAFB for use on the AF-12's.</p> <p>We are proceeding with this job based upon Headquarters' approval of our 30 April ECP list (HQ Message 6882).</p> <p style="text-align: right;"><i>Approved by [REDACTED] 2-9-65 filed in 22-9-2</i></p>					
<p>REASON FOR PROPOSAL : The Contractor has thus far used various pieces of his own instrumentation and equipment to check out problems. This equipment has thus far been hand carried to the area of need each time a problem has arisen. This ECP will provide the program with new checkout equipment in a suitable form and sufficient quantity.</p> <p>Supplying a cart for each airplane location will greatly reduce the amount of time used for the operational checkout of all servos and hydraulic actuators used in the control system. The addition of this piece of equipment should greatly enhance the efficiency of pre-flight and post-flight trouble shooting.</p>					
ES		ESTIMATED COST AND TIME INVOLVED :			
		ADDITIONAL FUNDING REQUIRED :			
CP		ESTIMATED COST FOR KITS OR PARTS : See Page 2.			
		ECP Budgetary Target Price \$101,275 Estimate of Rel. Program Costs 15,000 Estimated Total Program Costs \$116,275			
ITEMS AFFECTED BY PROPOSAL :					
SAFETY	MISSION EFFECT- TIVENESS	PERFORM- ANCE	OPERATING PROCEDURE	INTER- CHANGE- ABILITY	WEIGHT OR WEIGHT & BALANCE
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TOOLS & SUPPORT EQUIPMENT	MAINTENANCE PROCEDURE	SERVICE LIFE	FLIGHT MANUAL	MAINTENANCE MANUAL	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
EST. MAN/HRS. REQ'D. TO ACCOMPLISH CHANGE IN FIELD					
SOURCE OF PARTS FOR KIT			AVAILABILITY _____ WEEKS AFTER APPROVAL		
NOT APPLICABLE					
DISPOSITION OF SPARES AFFECTED					
NOT APPLICABLE					
INITIATED BY :			APPROVED : WSPO		
LAC - [REDACTED]			18001-2		

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Approved For Release 2001/06/09 : CIA-RDP69B00279R000100110001-2

Approved For Release 2001/06/09 : CIA-RDP69B00279R000100110001-2

December 2, 1964

To: Leo Geary ✓

[REDACTED]

cc: Contracting Officer - [REDACTED]

STATINTL

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In response to your request for a price proposal for (1) Command Transmitter Systems for the JC-130 B airplanes and (2) for Recovery Parachute Systems, we submit the following:

It should be kept in mind that there are some unknowns related to these systems and we would propose to firm these prices up as soon as these unknowns can be determined.

I Command Transmitter Systems - JC-130 B's

A. Prototype Kit

\$7,000

This includes design, tooling, fabrication, assembly and installation of one kit in a JC-130 B at Edwards.

Note: The equipment costs are included in Item C below.

B. Provide 9 each Kits

\$14,000

This includes in-plant fabrication and assembly.

Note: Installation of these kits to be performed by the customer.

C. 10 Sets of Transmitters, Amplifiers, Coax Switches, Cabling, etc.

\$40,000

This includes the cost of qualification tests by the supplier. It is possible that these tests may not be necessary; therefore, the price would be reduced accordingly.

D. Provide 5 Sets (50% Spares) for Item C above.

\$12,500

Total Estimated Price

\$73,500

E. Schedule: Approximately two weeks time span is required for us to tool for, mock-up, fabricate and assemble the prototype kit. We will require five days to install this prototype kit in a C-130 at Edwards.

-2-

E. Schedule: (Cont'd)

It will require ninety days to obtain the transmitters and amplifiers; however, there is a spare transmitter and amplifier available [REDACTED] which could be used for the prototype installation.

II Recovery Parachute Systems

- A. Procure 50 Parachutes, including reef cutters
- B. Provide 10 Test Hatches

This includes tooling, fabrication, assembly and packaging.

Total


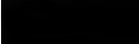
Note: The above does not include AGE to handle the hatches. We assume that this is available.

- C. Schedule: As of 10-21-64 we authorized our vendor to obtain long lead time material and parts for 50 parachutes and reef cutters. They will require approximately 30 days after go ahead to furnish the first chute and can deliver 2/week thereafter.

We can provide the first hatches in 90 days.

Sincerely,

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Approved For Release 2001/06/09 : CIA-RDP69B00279R000100110001-2										
LOCKHEED-CALIFORNIA COMPANY				ENGINEERING STUDY <input type="checkbox"/>		LAC 22-35				
DATE 30 NOVEMBER 1964				AFFECTS: WSPO <input type="checkbox"/>		PROJECT <input checked="" type="checkbox"/>				
NAME OF MAJOR COMPONENT			PART OR LOWEST SUBASSEMBLY			PART NO. & MODEL OR TYPE				
TITLE OF PROPOSAL : ALL ATTITUDE FUEL QUANTITY SYSTEM										
<p>NATURE OF PROPOSAL: This ECP covers (1) design and development of new probes for all fuel tanks. (2) design and tooling for changes required to the vehicles as result of the new probes. (3) fabrication, assembly and procurement of all parts necessary to install the new probes. The new probes will be installed in all A-12 Aircraft, excluding S/N 124.</p> <p>We are proceeding with the probe for Tank #4.</p> <div style="text-align: right; margin-top: 20px;">  <p style="margin-top: -20px;">64 9-65 22-9-2 file</p> </div>										
<p>REASON FOR PROPOSAL: The present fuel quantity was designed to be as light, simple and reliable as possible. This resulted in a single capacitance probe in each tank which is accurate for the design cruise condition (i.e., 7½ degrees nose up). We have received complaints from the pilots about the accuracy of the system during non design cruise conditions, especially during letdown. During letdown the fuel quantity is low, the nose is down and the aircraft is decelerating. Under these conditions the probes can be completely uncovered, resulting in a zero quantity reading while several thousand pounds may remain. To correct these conditions it is proposed that two probes be installed in each tank. The resultant fuel quantity system will be accurate over a range of 15 degrees nose up to 15 degrees nose down. These probes will have the same overall capacitance as the present switch so the present selector switch, fuel additive compensator and cabling need not be changed. See Page 2</p>										
ES		ESTIMATED COST AND TIME INVOLVED :						STATINTL		
CP		ADDITIONAL FUNDING REQUIRED : ESTIMATED COST FOR KITS OR PARTS : See Page 2 ADDITIONAL FUNDING REQUIRED :						RDP Budgetary Target Price Estimate of Rel. Progr. Costs Estimate Total Progr. Costs		
ITEMS AFFECTED BY PROPOSAL :										
SAFETY <input type="checkbox"/>	MISSION EFFEC- TIVENESS <input type="checkbox"/>	PERFORM- ANCE <input type="checkbox"/>	OPERATING PROCEDURE <input type="checkbox"/>	INTER- CHANGE- ABILITY <input type="checkbox"/>	WEIGHT OR WEIGHT & BALANCE <input type="checkbox"/>	TOOLS & SUPPORT EQUIPMENT <input type="checkbox"/>	MAINTE- NANCE PROCEDURE <input type="checkbox"/>	SERVICE LIFE <input type="checkbox"/>	FLIGHT MANUAL <input type="checkbox"/>	MAINTE- NANCE MANUAL <input type="checkbox"/>
EST. MAN/HRS. REQ'D. TO ACCOMPLISH CHANGE IN FIELD										
SOURCE OF PARTS FOR KIT						AVAILABILITY _____ WEEKS AFTER APPROVAL				
Service Bulletin to be Written										
DISPOSITION OF SPARES AFFECTED Existing probes removed from Articles will be sent to the Depot to back-up S/N 124										
INITIATED BY :						APPROVED : 				
Approved For Release 2001/06/09 : CIA-RDP69B00279R000100110001-2						PROJECT				

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Approved For Release 2001/06/09 : CIA-RDP69B00279R000100110001-2

Approved For Release 2001/06/09 : CIA-RDP69B00279R000100110001-2

LOCKHEED - CALIFORNIA COMPANY		ENGINEERING STUDY <input type="checkbox"/>		LAC 22-43						
		CHANGE PROPOSAL <input checked="" type="checkbox"/>								
DATE 20 November 1964		AFFECTS: WSPO <input type="checkbox"/>		PROJECT <input checked="" type="checkbox"/>						
NAME OF MAJOR COMPONENT IFF		PART OR LOWEST SUBASSEMBLY		PART NO. & MODEL OR TYPE						
TITLE OF PROPOSAL: REPLACE APX-46 IFF WITH WILCOX 914-X AND INSTALL NEW CONTROL UNIT										
<p>NATURE OF PROPOSAL:</p> <p>A. Replace APX-46 IFF with Wilcox 914-X in all A-12 aircraft being retrofitted with ADP inlet control (ECP 22-48). This includes the non-recurring Engineering and Tooling, and installation into the aircraft.</p> <p>B. Replace IFF control units in all A-12 aircraft. This includes all design, development, fabrication and installation required to outfit all A-12 aircraft.</p> <p>We are proceeding with this ECP based upon approval of ECP 22-48. Present airplane work being accomplished is based upon all ships, but procurement of IFF has been issued for 6 ships only to correspond with present authority on ECP 22-48.</p> <p style="text-align: right;"><i>Approved by [redacted] 2-4-65 filed in [redacted]</i></p>										
<p>REASON FOR PROPOSAL:</p> <p>A. 1. The retrofit of the ADP inlet control requires use of space presently occupied by the APX-46 IFF.</p> <p>2. There is a smaller amount of space available which is sufficient for a customized version of the Wilcox 914-X.</p> <p>3. In addition, the Wilcox IFF is lighter, has a lower recurring cost and is technically superior to the APX-46 (see attached technical comparison).</p> <p>B. 1. The present control consists of two (2) panels located on the left hand console slightly behind the pilot. In a pressure suit he can, with difficulty, manipulate the transponder control, and the emergency position requires the use of both hands. (Continued on Page 2.)</p>										
ES	ESTIMATED COST AND TIME INVOLVED:		ECP Budgetary Target Price		[redacted] STATINTL					
	SEE PAGE 2. ADDITIONAL FUNDING REQUIRED:		Est. of Rel. Program Costs Total Program Costs							
CP	ESTIMATED COST FOR KITS OR PARTS:		176,000 15 June 65 [redacted]							
	ADDITIONAL FUNDING REQUIRED:									
ITEMS AFFECTED BY PROPOSAL:										
SAFETY	MISSION EFFEC- TIVENESS	PERFORM- ANCE	OPERATING PROCEDURE	INTER- CHANGE- ABILITY	WEIGHT OR WEIGHT & BALANCE	TOOLS & SUPPORT EQUIPMENT	MAINTENANCE PROCEDURE	SERVICE LIFE	FLIGHT MANUAL	MAINTENANCE MANUAL
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
EST. MAN/HRS. REQ'D. TO ACCOMPLISH CHANGE IN FIELD										
SOURCE OF PARTS FOR KIT				AVAILABILITY _____ WEEKS AFTER APPROVAL						
SERVICE BULLETINS TO BE WRITTEN										
DISPOSITION OF SPARES AFFECTED										
APX-46 UNITS WILL BE RETURNED TO DEPOT FOR DISPOSITION										
STATINTL										
INITIATED BY:				APPROVED: [redacted]						
LAC Approved For Release 2001/06/09 : CIA-RDP69B00279R000100110001-2				PROJECT						

- B. 1. (Continued)
The Pilot cannot adequately see the Coder Control to change codes in flight (required under emergency conditions).
2. The new control panel incorporates all the necessary operating functions in a single unit. All codes can be set during pre-flight checkout and an emergency bar is provided so that the FAA Emergency Code is generated by actuating a switch. We have demonstrated our Engineering Model to the pilots and they have expressed their satisfaction.

STATINTL



IFF TECHNICAL CHARACTERISTICS COMPARISON

	<u>APX-46</u>	<u>Wilcox 914-X</u>
1. Form Factor	Exhibit WCIN 58-18	1/2 ATR (Short)
2. Weight	25 lbs.	14 lbs.
3. Power Requirements	70 watts 115 VAC 8 watts 275 VDC	45 watts @ 27.5 VDC
4. Cooling	Convection and External Forced Air	Convection and External Forced Air
5. Shock and Vibration	MIL-T-5422	MIL-T-5422
6. Altitude	100,000 ft.	100,000 ft.
7. Humidity	MIL-T-5422	MIL-T-5422
8. Ambient Temperature	MIL-T-5400 Class I	MIL-T-5400 Class I
9. R.F. Interference	MIL-I-26600	MIL-I-6181
10. Receiver Frequency	1018.0 to 1042.0	1015.0 to 1055.0
11. Receiver Frequency Control	Quartz Crystal	Quartz Crystal
12. Receiver Bandwidth		
3 db	Not Specified	6 mc minimum
6 db	7 mc min., 9 mc max.	7 mc min., 9 mc max.
40 db	Not more than 28 mc	Not more than 28 mc
60 db	Not more than 50 mc	Not more than 50 mc
13. Receiver Spurious	Greater than 35 db	Greater than 60 db
14. Receiver Sensitivity	-75 dbm	-78 dbm
15. High-Low Sensitivity Control	15 db range	40 db range
16. Interrogation Modes	4 - Mode 1, Mode 2, Mode 3, Mode 4	5 - Mode 1, Mode 2, Mode 3, Mode 4, and Mode C
17. Reply Codes		
Mode 1	32	4096
Mode 2	4096	4096
Mode 3	64	4096
Mode 4	Provided	Provided
Mode C	No provision	4096

	<u>APX-46</u>	<u>Wilcox 914-X</u>
18. Reply Capability	1% Duty Factor	1% Duty Factor
19. Transmitter	Tuned Cavity Resonator	Tuned Cavity Resonator
20. Transmitter Frequency	1080 to 1100 mc	1078 to 1105 mc
VSWR	Unknown	(a) Frequency change of less than 0.5 mc with 5:1 VSWR on transmission
Duty Factor	Unknown	(b) Frequency change of less than 1.2 mc from 0.1% duty factor to 1% duty factor
21. Self Test	Provided	Provided
22. Number of Transistors	120 (Non-Military approved)	80 (MIL approved)
23. Number of Vacuum Tubes	4	1
24. Transmitter MTBF	300 hrs.	1000 hrs.
25. Crystal Mixer Diode MTBF	300 hrs.	Indefinite - 1500 hrs.
26. Side Lobe Suppression	10 db Grey Area	6-9 db Grey Area
27. Construction	Modular	Modular Cards

CDB:bjr
9-10-64

LOCKHEED-CALIFORNIA COMPANY

ENGINEERING STUDY ☐CHANGE PROPOSAL ☒

LAC 22-66

DATE 27 October 1964

AFFECTS:

WSPO ☒PROJECT ☐

NAME OF MAJOR COMPONENT

PART OR LOWEST SUBASSEMBLY

PART NO. & MODEL OR TYPE

TITLE OF PROPOSAL:

ALTERNATE STEERING SYSTEM FOR AF-12's

NATURE OF PROPOSAL:

This ECP covers the Engineering Design and the Fabrication of Kits required to provide an alternate steering system,utilizing the right hand hydraulic system,for all AF-12 Aircraft. This job would require rework in the Nose Wheel Well, Main Wheel Well and the Forward Left Hand Missile Bay.

REASON FOR PROPOSAL:

Provide the Article self steering ability in case of loss of left hand,engine driven, hydraulic pumps.

23,000 per
ECP, 5 June 65

ES

ESTIMATED COST AND TIME INVOLVED:

ADDITIONAL FUNDING REQUIRED:

CP

ESTIMATED COST FOR KITS OR PARTS:

ECP Budgetary Target Price

\$21,000

Related Program Estimated Costs

18,500

ADDITIONAL FUNDING REQUIRED:

Total Program Estimated Costs

\$39,500

ITEMS AFFECTED BY PROPOSAL:

SAFETY	MISSION EFFEC- TIVENESS	PERFORM- ANCE	OPERATING PROCEDURE	INTER- CHANGE- ABILITY	WEIGHT OR WEIGHT & BALANCE	TOOLS & SUPPORT EQUIPMENT	MAINTENANCE PROCEDURE	SERVICE LIFE	FLIGHT MANUAL	MAINTENANCE MANUAL
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

EST. MAN/HRS. REQ'D. TO ACCOMPLISH CHANGE IN FIELD

SOURCE OF PARTS FOR KIT

AVAILABILITY _____ WEEKS AFTER APPROVAL

SERVICE BULLETIN NO. 234

DISPOSITION OF SPARES AFFECTED

NOT APPLICABLE

INITIATED BY:

APPROVED: WSPO

STATINTL

LAC

Approved For Release 2001/06/09 : CIA-RDP69B00279 [REDACTED] 2

STATINTL

Approved For Release 2001/06/09 : CIA-RDP69B00279R000100110001-2

Approved For Release 2001/06/09 : CIA-RDP69B00279R000100110001-2

Approved For Release 2001/06/09 : CIA-RDP69B00279R000100110001-2																					
LOCKHEED - CALIFORNIA COMPANY				ENGINEERING STUDY <input type="checkbox"/>				LAC 22-64													
				CHANGE PROPOSAL <input checked="" type="checkbox"/>																	
DATE 20 October 1964				AFFECTS: WSPO <input checked="" type="checkbox"/>				PROJECT <input type="checkbox"/>													
NAME OF MAJOR COMPONENT			PART OR LOWEST SUBASSEMBLY				PART NO. & MODEL OR TYPE														
TITLE OF PROPOSAL : FUEL QUANTITY MODIFICATION TO FIVE KC-135's																					
NATURE OF PROPOSAL : This ECP provides kits necessary to modify the fuel quantity measuring system for the three tanks required on five (5) additional KC-135's. The kit will be like that previously supplied by us under S.B. 299.																					
REASON FOR PROPOSAL : Requirement established by TWX [REDACTED] STATINTL Refer also to TWX's as follows: [REDACTED] STATINTL ECP was requested by TWX [REDACTED] We will start upon notification of technical approval. STATINTL																					
<i>31,000 per Listing ECP 15 June 67</i>																					
ESTIMATED COST AND TIME INVOLVED : ADDITIONAL FUNDING REQUIRED :																					
<table border="0" style="width: 100%;"> <tr> <td rowspan="3" style="width: 5%; text-align: center; vertical-align: middle;">CP</td> <td style="width: 40%;">ESTIMATED COST FOR KITS OR PARTS :</td> <td style="width: 55%;">Budgetary Target Price Under this ECP</td> <td style="width: 10%; text-align: right;">\$32,000</td> </tr> <tr> <td></td> <td>Related Costs</td> <td style="text-align: right;">11,000</td> </tr> <tr> <td>ADDITIONAL FUNDING REQUIRED :</td> <td>Total Program Cost</td> <td style="text-align: right;">\$43,000</td> </tr> </table>												CP	ESTIMATED COST FOR KITS OR PARTS :	Budgetary Target Price Under this ECP	\$32,000		Related Costs	11,000	ADDITIONAL FUNDING REQUIRED :	Total Program Cost	\$43,000
CP	ESTIMATED COST FOR KITS OR PARTS :	Budgetary Target Price Under this ECP	\$32,000																		
		Related Costs	11,000																		
	ADDITIONAL FUNDING REQUIRED :	Total Program Cost	\$43,000																		
ITEMS AFFECTED BY PROPOSAL :																					
SAFETY <input type="checkbox"/>	MISSION EFFEC- TIVENESS <input type="checkbox"/>	PERFORM- ANCE <input type="checkbox"/>	OPERATING PROCEDURE <input type="checkbox"/>	INTER- CHANGE- ABILITY <input type="checkbox"/>	WEIGHT OR WEIGHT & BALANCE <input type="checkbox"/>	TOOLS & SUPPORT EQUIPMENT <input type="checkbox"/>	MAINTENANCE PROCEDURE <input type="checkbox"/>	SERVICE LIFE <input type="checkbox"/>	FLIGHT MANUAL <input type="checkbox"/>	MAINTENANCE MANUAL <input type="checkbox"/>											
EST. MAN/HRS. REQ'D. TO ACCOMPLISH CHANGE IN FIELD																					
SOURCE OF PARTS FOR KIT SERVICE BULLETIN 677						AVAILABILITY _____ WEEKS AFTER APPROVAL															
DISPOSITION OF SPARES AFFECTED N/A																					
INITIATED BY : SPO						APPROVED : WSPO			STATINTL												
Approved For Release 2001/06/09 : CIA-RDP69B00279R000100110001-2																					

STATINTL

Approved For Release 2001/06/09 : CIA-RDP69B00279R000100110001-2

Approved For Release 2001/06/09 : CIA-RDP69B00279R000100110001-2

ARC 50 SPARES AND AGE PROVISIONING SUMMARY

GENERAL NOTES:

1. Systems To Be Supported

- | | |
|--------------------------------|----|
| a. KC-135 (AY) | 23 |
| (1) 21 Tanker Aircraft | |
| (2) 1 Test Set MRL | |
| (3) 1 GRD Station Beale | |
| b. A-12 (BY) | 12 |
| (1) 11 A-12 Aircraft | |
| (2) 1 Test Set MRL | |
| c. R-12 (BX) | 31 |
| (1) 6 R-12 Aircraft (HT 3664) | |
| (2) 25 R-12 Aircraft (HA 3666) | |
| d. Ground Station (GY) | 7 |

2. KC-135 Spares Quantities Based On:

- a. All original equipment has been modified to the AY configuration
- b. Five sets of ARC-23 being modified to AY configuration for use as spares. This leaves five additional sets of ARC-23 to be modified to AY configuration for additional tanker installations.

3. A-12 Spares Quantities Based On:

- a. All original equipment has been modified to BY configuration

4. R-12 Spares Quantities Reflect HT 3664 Procurement

5. The decision to conduct field maintenance at Beale to the modular level of parts replacement requires a re-review of AGE design and quantities. Therefore, a recap of AGE requirements is included in the attached summary.

* This revision reflects provisioning for support of the ARC 50 systems thru Contract HA 3666 as determined at a provisioning conference with the SPO and PSO held at ADP facilities on January 18-19, 1965. The list as published herein, differs from the entries made at the provisioning conference to the extent that the items described as "Hit-Ground Station AGE" and "Hit-Ground Station Spares" have been dropped from the list, with the equivalent assets being shown for the individual component line items

Issued January 18, 1965

* Revised: January 25, 1965

PART NO.	DESCRIPTION	KC	R	GS	A	AVAIL SPARES	SMR	ART QTY	OT	LT	BW1	BW3	BW4	BW5	BW6	MRL	GS	MTU	TOTAL	TO BE PROCURED
708660-801, 802	Transceiver	x				11	FS	1	3	6									11	0
714218-802	Chassis	x				4	DS	1	2	6									4	0
714295-801	Oscillator	x	x	x	x	4	DS	1	2	6				11					11	0
714221-801, 802	Receiver	x	x	x	x	4	DS	1	2	6	4	4	2	2					4	0
714222-801, 802	Programmer	x	x	x	x	4	DS	1	2	6	4	4	2	2			4		16	12
714223-801	Generator	x	x	x	x	4	DS	1	2	6	4	4	2	2			4		16	12
714224-801, 802	Modem	x	x	x	x	4	DS	1	2	6	4	4	2	2			4		16	12
714016-801	Power Supply	x				4	DS	1	2	6	2		2	2			4		16	12
714220-801	Module-Range	x	x	x	x	4	DS	1	2	6	2		2	2			4		10	16
708661-801, 802	Transceiver					16	FS	1	3	6	4	4	2	2			4		16	12
714219-801, 802	Chassis	x					DS	1	2	6	4	4	2	4	1			1	16	0
714008-801	Power Supply	x					DS	1	2	6	2		2	2					2	2
714001-801, 802	Transceiver						FS	1	3	6									8	8
714002-801	Chassis		x				DS	1	2	6									4	4
708796-801	Translator	x																	0	0
713953-801, 802	Power Supply	x	x	x	x	11	FS	1	3	6	3			8					11	0
713950-801, 802	Oscillator	x	x	x	x	4	DS	1	2	6	2	4	2	6			4		18	14
713961-801, 802	Synthesizer	x	x	x	x	4	DS	1	4	8	10	4	2	20			4		40	36
713954-801, 802	Multiplier	x	x	x	x	4	DS	1	2	8	6	4	2	3			4		19	15
713955-801	Transmitter	x				4	DS	1	2	8	6	4	2	12			4		28	24
713956-801, 802	Recvr-Main	x	x	x	x	4	REF													
713952-801, 802	Converter	x	x	x	x	4	DS	1	2	8	6	4	2	12			4		28	24
713951-801, 802	Recvr-Guard	x	x	x	x	4	DS	1	2	8	6	4	2	12			4		28	24
713957-801, 802	Modem	x	x	x	x	4	DS	1	2	8	6	4	2	6			4		22	18
713921-801	Chassis	x				4	DS	1	2	8	6	4	2	12			4		28	24
709080-801	Translator													4					4	0
714850-801	Transmitter	x	x	x	x	4	DS	1	2	8	6	4	2	5	1				16	0
713922-801, 802	Chassis	x					DS	1	2	8	1	1	1	1			1		28	24
713955-801 replaced by 714850-801 - All existing 713955-801 to be modified at MRL when returned for repair or overhaul.																			4	4

PART NO.	DESCRIPTION	KC	R	GS	A	AVAIL SPARES	SMR	QTY	OT	LT	BW1	BW3	BW4	BW5	BW6	MRL	GS	MTU	TOTAL	TO BE PROCURED
713965-804	Translator			x			FS	1	3	8							4		4	4
713966-803	Chassis			x			DS	1	2	8							4		5	1
713997-801	Relay			x		4	DS	1	2	8		1					4		5	1
713996-801	Relay			x		4	DS	1	2	8		1					4		5	1
** 708824-801, 802	Translator				x		REF													
708800-801	Amplifier	x				11	FS	1	3	6	3			8					11	0
713960-801	Chassis	x				4	DS	1	2	6				4			4		4	0
713958-801	Power Supply	x		x		4	DS	1	2	6							4		4	0
713959-801	Amplifier	x		x		4	DS	1	2	6							4		4	0
708850-801	Control	x		x		4	DS	1	2	6							4		5	0
713963-802	Amplifier			x			FS	1	3	6									0	0
713964-802	Chassis			x			DS	1	2	6							4		4	0
713992-802	Relay			x		4	DS	1	2	6							4		4	0
713993-801	Relay			x		4	DS	1	2	6							4		4	0
713994-801	Relay			x		4	DS	1	2	6							4		4	0
713995-801	Relay			x		4	DS	1	2	6							4		5	0
714004-801	Control-GRD. Sta.			x			FS	1	3	6		1							5	5
714005-801	Chassis			x			DS	1	2	6							4		5	0
714686-801	Amplifier			x		4	FS	1	2	6		1					4		5	0
713969-801	Selector			x		4	DS	1	2	6		1					4		5	0
708823-801, 802	Panel-Transcvr.	x				15	DS	1	2	6	3				12				15	0
708827-801, 802	Panel-Transcvr.		x		x	16	DS	1	1	6	4	4	3	3	1			1	16	0
708662-801	Control-Transcvr.	x		x	x	13	DS	1	2	6	4	4		8			4		20	7
708663-801	Control-Transcvr.		x			6	DS	2	2	6	4		2	4	2			1	13	7
708664-801	Indicator-Range	x		x	x	17	DS	1	2	6	2	3		8			4		17	0

** Superseded by 709080-801

APPLICATION					RECOMMENDED DISTRIBUTION														TOTAL	TO BE PROCURED	
PART NO.	DESCRIPTION	KC	R	GS A	AVAIL SPARES	SMR	ART QTY	OT	LT	BWL	BW3	BW4	BW5	BW6	MRL	GS	MTU				
708665-801	Indicator-Range		x		6	DS	1	2	6	2		4	6	1			1	14	8		
708821-801	Panel-Translator	x			15	DS	1	1	8	3			12					15	0		
708825-801	Panel-Translator		x	x	16	DS	1	1	8	4	4	2	4	1			1	16	0		
708797-801	Control-Translator	x			11	DS	1	2	8	2			9					11	0		
708946-801	Control-Translator		x		6	DS	2	2	8	4		4	4	2			1	15	9		
708829-801	Control-Translator			x x	2	DS	1	2	8	1	4					4		9	7		
708831-801	Panel-AMP Cooler	x			15	DS	1			3			12					15	0		
708977-801	Indicator-Freq.		x		6	DS	2	2	8	3		2	4	2			1	12	6		
708822-801	Mount-Transcvr.	x			5	DS	1		4	1			4					5	0		
708846-801	Mount-Transcvr.			x	3	DS	1		4	1	2							3	0		
708820-801	Mount-Transltr.	x			5	DS	1		4	1			4					5	0		
708847-801	Mount-Transltr.			x	3	DS	1		4	1	2							3	0		
708830-801	Mount-Amplfr.	x			5	DS	1		4	1			4					5	0		
708805-801	Antenna	x			6	DS	1	2	4	2			4					6	0		
708803-801	Preamplifier				6	OBSOLETE															
708804-801	Inverter			x	13	DS	1	3	6	5	8							13	0		
507908-801	Blower			x	13	DS	2	2	6	3	10							13	0		
713387-801	Board-Matrix					OBSOLETE															

PART NO.	DESCRIPTION	KC	R	GS	A	AVAIL SPARES	SMR	ART QTY	OR	LT	BW1	BW3	BW4	BW5	BW6	MRL	GS	MTU	TOTAL	TO BE PROCURED
713388-801	Board-Matrix					55														
708956-802, 803	Ground Station	x	x	x	x	7	FS			8		1					4		5	0
713976-801	Power Supply pwr. Distr.				x	4	DS	1	3	4							4		4	0
712997-806	Attenuator-pwr. Distr.				x	4	DS	1	3	4							4		4	0
714824-801	Filter-Relay				x	4	V	1		3							4		4	0
* 708810-801	Tester-Transmitter	x	x	x	x	8	FS			6		4	2	3					9	1
* 708806-802	Test-Set-Translator	x	x		x	12	FS			6		5	3	4					12	0
708807-802	Test Set-Transcvr.					7														
** 715094-801	Test Set-Transcvr.	x	x		x		FS			8		4	2	4			4		14	10
* 708809-802	Test Set-Translator	x	x	x	x	10	FS			8		3	1	3			4		11	1
*** 708808-802	Test Set-Transcvr.	x	x	x	x	9	FS			4		3	1	2			4		10	1
**** 715093-801	Test Set-Transcvr.	x	x	x	x		FS			8									0	0
708928-801	Test Set-Elec. Cable	x		x	x	2	FS			4		4	2	2			4		8	6
708928-802, 803	Ground Station						DS			4		2					4		6	0
709088-801	Meter-Transcvr. Test			x		6	DS			4										

* Includes HA 3666 quantities
 ** Replaces 708807-802

*** (1) Includes HA 3666 quantities.

(2) Requires several items of commercial test equipment not shown in this list.

(3) Propose procurement of 715093-801.

(4) Replaces 708670-801

**** Packages 708808-802 and commercial test equip.

Approved For Release 2001/06/09 : CIA-RDP69B00279R000100110001-2											
LOCKHEED-CALIFORNIA COMPANY				ENGINEERING STUDY <input type="checkbox"/>				LAC 22-65			
				CHANGE PROPOSAL <input checked="" type="checkbox"/>							
DATE 30 OCTOBER 1964				AFFECTS: WSPO <input checked="" type="checkbox"/>				PROJECT <input type="checkbox"/>			
NAME OF MAJOR COMPONENT ARC-50 AY				PART OR LOWEST SUBASSEMBLY				PART NO. & MODEL OR TYPE			
TITLE OF PROPOSAL : ARC-50 AY INSTALLATION KITS FOR FIVE KC-135's											
NATURE OF PROPOSAL : This ECP provides the Kits necessary to incorporate ARC-50 Communication Equipment into five (5) additional KC-135 Tankers. The Kits will incorporate changes previously accomplished by Service Bulletins 251,252,470, 547, 678, and 718.											
REASON FOR PROPOSAL : Requirement established by TWX [REDACTED] <div style="text-align: right;">STATINTL</div>											
This ECP is in accordance with our TWX's 1780 and letter Dick to Temp, dated 30 October 1964. We will start upon notification of technical approval.											
ESTIMATED COST AND TIME INVOLVED : ADDITIONAL FUNDING REQUIRED :											
ESTIMATED COST FOR KITS OR PARTS : Budgetary Target Price [REDACTED] <div style="text-align: right;">STATINTL</div>											
ADDITIONAL FUNDING REQUIRED : (See Page 2)											
ITEMS AFFECTED BY PROPOSAL :											
SAFETY	MISSION EFFEC- TIVENESS	PERFORM- ANCE	OPERATING PROCEDURE	INTER- CHANGE- ABILITY	WEIGHT OR WEIGHT & BALANCE	TOOLS & SUPPORT EQUIPMENT	MAINTENANCE PROCEDURE	SERVICE LIFE	FLIGHT MANUAL	MAINTENANCE MANUAL	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
EST. MAN/HRS. REQ'D. TO ACCOMPLISH CHANGE IN FIELD											
SOURCE OF PARTS FOR KIT						AVAILABILITY _____ WEEKS AFTER APPROVAL					
SERVICE BULLETIN 678											
DISPOSITION OF SPARES AFFECTED											
N/A											
INITIATED BY : EPO						APPROVED : WSPO [REDACTED] <div style="text-align: right;">STATINTL</div>					

STATINTL

Approved For Release 2001/06/09 : CIA-RDP69B00279R000100110001-2

Approved For Release 2001/06/09 : CIA-RDP69B00279R000100110001-2

FORM 121 USE PREVIOUS EDITIONS

CLASSIFIED MESSAGE

DATE 1701Z 23 OCT 64

S E C R E T

TO : DIRECTOR

FROM : [REDACTED]

ACTION:

INFO :

TOR: 1745Z 23 OCT 64

ROUTINE

IN 54020

TO [REDACTED]

INFO

CITE [REDACTED]

25X1A

REF: [REDACTED]

SUBJECT: QUICK REMOVAL OF AF-262 INS BAY HATCH

1. WE ESTIMATE REMOVAL TIME OF PRESENT CONFIGURATION IS TWELVE MINUTES USING TWO MEN.

2. USE OF LATCHING DEVICE SIMILAR TO EQUIPMENT BAY IS IMPRACTICAL. TO ALLOW ROOM FOR LATCHES AND EXTRA THICKNESS OF DOOR WE WOULD HAVE TO COMPLETELY REDESIGN THE BAY.

3. THE APPROACH OF USING CAM LOC TYPE FASTENERS IS NOT POSSIBLE AS THEY WILL NOT CARRY SHEAR LOAD.

4. ONLY REASONABLE APPROACH WOULD BE TO USE NEW CALFAX TYPE FASTENERS. THIS WOULD REDUCE REMOVAL TIME TO APPROXIMATELY SIX MINUTES USING TWO MEN. THIS IS ALSO DIFFICULT JOB REQUIRING ADDITION OF STRUCTURAL ANGLES, REMOVAL OF ALL PLATE NUTS AND EXTENSIVE MACHINING TO ALLOW INSTALLATION OF STUDS AND RECEPTICALS. IN ORDER TO DO THIS WORK WE WOULD HAVE TO REMOVE THE EQUIPMENT FROM BAY AS WELL AS INSULATION ON BULKHEADS AND LONGERONS.

5. WE DO NOT RECOMMEND THIS JOB.

6. PLEASE ADVISE IF YOU STILL REQUIRE ECR.

END OF MESSAGE

S E C R E T

CLASSIFIED MESSAGE

25X1A

ORIG: [REDACTED]
UNIT: ASD/OSA
EXT: 5384
DATE: 5 AUGUST 64

SECRET

1	ASD/OSA
2	ASD/OSA
3	D. TECH
4	AD/CSP
5	CD/CS
6	OXO/OSA
7	RT. CS

25X1A

TO: [REDACTED]
FROM: DIRECTOR

OSA 1-15

25X1A

TO: [REDACTED] INFO

25X1A

OXOART

PLS SUBMIT ECP FOR INS HATCH REMOVAL TECHNIQUE STATEMENT
SYSTEM USED FOR Q-BAY HATCH. ULTIMATE OBJECTIVE TO REDUCE REMOVAL
TIME OF INS.

END OF MESSAGE

COORD: [Signature]
CD/OSA

25X1A

[REDACTED]

ASD/OSA

COORDINATING OFFICERS

SECRET

LOCKHEED - CALIFORNIA COMPANY		ENGINEERING STUDY <input type="checkbox"/>		LAC 22-58							
		CHANGE PROPOSAL <input checked="" type="checkbox"/>									
DATE 30 September 1964		AFFECTS: WSPO <input checked="" type="checkbox"/>		PROJECT <input checked="" type="checkbox"/>							
NAME OF MAJOR COMPONENT OIL PRESSURE TRANSMITTER		PART OR LOWEST SUBASSEMBLY		PART NO. & MODEL OR TYPE							
TITLE OF PROPOSAL : REPLACE BENDIX OIL PRESSURE TRANSMITTER WITH AIRSEARCH TRANSMITTER											
NATURE OF PROPOSAL :											
PHASE I Design and manufacture of a Prototype Oil Pressure Transmitter and Indicator.											
PHASE II Design, Development and Tooling Required for Production Type Transmitter and Indicator.											
Manufacture of Transmitters, Indicator and Airplane Modification Kits on all A-12 and AF-12 airplanes.											
Installation of above Kits will be accomplished under Contracts FT-21 and SC-23.											
We are proceeding with PHASE I of this program.											
REASON FOR PROPOSAL :											
Present Oil Pressure Transmitters have caused Flight Aborts. Attempts to improve the performance of the present Transmitters through Design Improvements have not been successful. Please also see letter dated 10-27-64, Kelly to John, same subject. 241											
A separate ECP will be submitted for the R-12 requirements. STATINTL											
<p style="text-align: right;">Approved by [Signature] filed in 32-9-2</p> <p style="text-align: right;">190,000 per Printing 45</p> <p style="text-align: right;">ECP, 5 June 65</p>											
ES	ESTIMATED COST AND TIME INVOLVED :										
	ADDITIONAL FUNDING REQUIRED :										
CP	ESTIMATED COST FOR KITS OR PARTS :										
	ADDITIONAL FUNDING REQUIRED :										
<p>Budgetary Estimates - PHASE I</p> <p>Estimate of Related Program Costs - PHASE II</p> <p>TOTAL PROGRAM COST STATINTL</p>											
ITEMS AFFECTED BY PROPOSAL :											
SAFETY	MISSION EFFEC- TIVENESS	PERFORM- ANCE	OPERATING PROCEDURE	INTER- CHANGE- ABILITY	WEIGHT OR WEIGHT & BALANCE	TOOLS & SUPPORT EQUIPMENT	MAINTENANCE PROCEDURE	SERVICE LIFE	FLIGHT MANUAL	MAINTENANCE MANUAL	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
EST. MAN/HRS. REQ'D. TO ACCOMPLISH CHANGE IN FIELD						AVAILABILITY _____ WEEKS AFTER APPROVAL					
SOURCE OF PARTS FOR KIT						SERVICE BULLETIN TO BE WRITTEN					
DISPOSITION OF SPARES AFFECTED											
INITIATED BY :						APPROVED : WSPO					
LAC						PROJECT					

STATINTL

Approved For Release 2001/06/09 : CIA-RDP69B00279R000100110001-2

Approved For Release 2001/06/09 : CIA-RDP69B00279R000100110001-2

LOCKHEED - CALIFORNIA COMPANY		ENGINEERING STUDY <input type="checkbox"/>	LAC 22-49							
		CHANGE PROPOSAL <input checked="" type="checkbox"/>								
DATE 24 October 1964		AFFECTS: WSPO <input type="checkbox"/>	PROJECT <input checked="" type="checkbox"/>							
NAME OF MAJOR COMPONENT Fuel Tanks	PART OR LOWEST SUBASSEMBLY		PART NO. & MODEL OR TYPE							
TITLE OF PROPOSAL: FUEL MANAGEMENT REVISION										
<p>NATURE OF PROPOSAL:</p> <p>This ECP covers the engineering design and fabrication of kits required to change the fuel tank sequencing of tanks #3 and #4. This change will be accomplished on all A-12's except #124 (12 ships).</p> <p>We are proceeding with this job.</p> <p style="text-align: right;"><i>Approved by [redacted] 2-9-65 filed in 22-49-2</i> STATINTL</p>										
<p>REASON FOR PROPOSAL:</p> <p>This ECP will result in tank #4 being the last tank in the fuel sequencing. As a result, the C.G. of the article will be moved further aft for a greater portion of the cruise condition. Moving the C.G. aft reduces trim drag, and results in greater range.</p> <p style="text-align: right;"><i>100,000 per ECP Listing 15 June 65</i></p>										
ES	ESTIMATED COST AND TIME INVOLVED:									
	ADDITIONAL FUNDING REQUIRED:									
CP	ESTIMATED COST FOR KITS OR PARTS:		ECP Budgetary/Target Price							
	ADDITIONAL FUNDING REQUIRED: (See Page 2)		Est. of Related Program Costs							
Total Program Cost STATINTL										
ITEMS AFFECTED BY PROPOSAL:										
SAFETY	MISSION EFFEC- TIVENESS	PERFORM- ANCE	OPERATING PROCEDURE	INTER- CHANGE- ABILITY	WEIGHT OR WEIGHT & BALANCE	TOOLS & SUPPORT EQUIPMENT	MAINTENANCE PROCEDURE	SERVICE LIFE	FLIGHT MANUAL	MAINTENANCE MANUAL
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
EST. MAN/HRS. REQ'D. TO ACCOMPLISH CHANGE IN FIELD										
SOURCE OF PARTS FOR KIT SERVICE BULLETIN 649						AVAILABILITY _____ WEEKS AFTER APPROVAL				
DISPOSITION OF SPARES AFFECTED NOTED ON SERVICE BULLETIN										
INITIATED BY: LAC						APPROVED: [redacted] PROJECT				

STATINTL

Approved For Release 2001/06/09 : CIA-RDP69B00279R000100110001-2

Approved For Release 2001/06/09 : CIA-RDP69B00279R000100110001-2

CLASSIFIED MESSAGE

ROUTING

25X1A
 ORIG: [REDACTED]
 UNIT: CD/OSA
 EXT: 6986
 DATE: 18 Aug 1964

SECRET

1	CD/OSA	9	
2	AD/OSA	10	
3	D/TECH	11	
4	MD	12	
5	RB	13	
6		14	
7		15	
8		16	

	DEFERRED	PRIORITY	INITIALS
X	ROUTINE	OPERATIONAL IMMEDIATE	INITIALS

21286

OSA 1-15 JM

25X1A TO [REDACTED] 25X1A INFO [REDACTED] CITE [REDACTED] 25X1A

OXCART

~~X~~ THE FOLLOWING ECP'S ARE TECHNICALLY APPROVED EXCEPT AS NOTED
 BELOW.

22-6-1*

22-31**

22-7-1*

22-32**

22-27**

22-18**

22-28**

A. ECP 22-6-1 INCLUDES MODIFYING 26 "A" UNITS IN A-12'S, 24 "B" UNITS
 IN KC-135'S AND THE EQUIVALENT OF 5 UNITS FROM SPARES. SUGGEST FIRST SENTENCE
 BE REWORDED AS FOLLOWS:

"THIS ECP INCLUDES THE EFFORT REQUIRED TO MODIFY ALL OF THE AIRBORNE
 ARC-50 EQUIPMENT AND COMPONENTS, BOTH A-12 AND KC-135, TO THE "Y" CONFIGURATION."

B. ECP 22-32 - BECAUSE OF THE SHORTCOMINGS OF THE FIREWARNING SYSTEM
 NOW BEING USED ON THE A-12, NUMEROUS PREMATURELY ABORTED FLIGHTS AND UNNECESSARY
 ENGINE REMOVALS WERE INCURRED. THE RESPONSIBILITY FOR THESE ABORTS AND REMOVALS
 WOULD APPEAR TO LIE WITH YOU WHO, IN THE FINAL ANALYSIS, ARE OBLIGATED TO PROVIDE

COORDINATING OFFICERS

SECRET

RELEASING OFFICER

GROUP 1
Excluded from automatic
downgrading and
declassification

AUTHENTICATING OFFICER

REPRODUCTION BY OTHER THAN THE ISSUING OFFICE IS PROHIBITED.

Copy No. 1

CLASSIFIED MESSAGE

ORIG :
UNIT :
EXT :
DATE :

SECRET

ROUTING			
1		9	
2		10	
3		11	
4		12	
5		13	
6		14	
7		15	
8		16	
P R O C E S S I N G		DEFERRED	PRIORITY
	X	ROUTINE	OPERATIONAL IMMEDIATE
		INITIALS	
		INITIALS	

TO :
FROM :
CONF :
INFO :

PAGE TWO

TO INFO CITE

A SATISFACTORY FIREWARNING SYSTEM. THEREFORE WE FEEL THAT PROFIT, IF ANY, FOR THIS ECP IS SUBJECT TO FURTHER DISCUSSIONS.

* FIRM TARGET AND CEILING PRICE

** BUDGET ESTIMATES

END OF MESSAGE

25X1A

C/CD/OSA
RELEASING OFFICER

COORDINATING OFFICERS

SECRET

GROUP 1
Excluded from automatic
downgrading and
declassification

AUTHENTICATING OFFICER

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CLASSIFIED MESSAGE

SECRET

25X1A
 ORIG: [REDACTED]
 UNIT: CD/OSA
 EXT: 6986
 DATE: 18 Aug 1964

ROUTING		
1	CD/OSA	9
2	AD/OSA	10
3	D/TECH	11
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5	RB	13
6		14
7		15
8		16

P R O C E D U R E		DEFERRED	PRIORITY	INITIALS
	X	ROUTINE	OPERATIONAL IMMEDIATE	INITIALS

25X1A
 TO: [REDACTED]
 FROM: DIRECTOR
 CONF:
 INFO:

21266

OSA 1-15 Jm

OXCART

~~X~~ THE FOLLOWING ECP'S ARE TECHNICALLY APPROVED EXCEPT AS NOTED
 BELOW.

22-6-1* 22-31**
 22-7-1* 22-32**
 22-27** 22-48**
 22-28**

A. ECP 22-6-1 INCLUDES MODIFYING 26 "A" UNITS IN A-12'S, 24 "B" UNITS
 IN KC-135'S AND THE EQUIVALENT OF 5 UNITS FROM SPARES. SUGGEST FIRST SENTENCE
 BE REWORDED AS FOLLOWS:

"THIS ECP INCLUDES THE EFFORT REQUIRED TO MODIFY ALL OF THE AIRBORNE
 ARC-50 EQUIPMENT AND COMPONENTS, BOTH A-12 AND KC-135, TO THE "Y" CONFIGURATION."

B. ECP 22-32 - BECAUSE OF THE SHORTCOMINGS OF THE FIREWARNING SYSTEM
 NOW BEING USED ON THE A-12, NUMEROUS PREMATURELY ABORTED FLIGHTS AND UNNECESSARY
 ENGINE REMOVALS WERE INCURRED. THE RESPONSIBILITY FOR THESE ABORTS AND REMOVALS
 WOULD APPEAR TO LIE WITH YOU WHO, IN THE FINAL ANALYSIS, ARE OBLIGATED TO PROVIDE

COORDINATING OFFICERS

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Copy No. (

CLASSIFIED MESSAGE

ORIG :
UNIT :
EXT :
DATE :

SECRET

ROUTING	
1	9
2	10
3	11
4	12
5	13
6	14
7	15
8	16

TO :

FROM :

CONF :

INFO :

PAGE TWO

	DEFERRED	PRIORITY	INITIALS
X	ROUTINE	OPERATIONAL IMMEDIATE	INITIALS

TO INFO CITE

A SATISFACTORY FIREWARNING SYSTEM. THEREFORE WE FEEL THAT PROFIT, IF ANY, FOR THIS ECP IS SUBJECT TO FURTHER DISCUSSIONS.

* FIRM TARGET AND CEILING PRICE

** BUDGET ESTIMATES

END OF MESSAGE

25X1A

C/CD/OSA
RELEASING OFFICER

COORDINATING OFFICERS

SECRET

GROUP 1
Excluded from automatic
downgrading and
declassification

AUTHENTICATING OFFICER

REPRODUCTION BY OTHER THAN THE ISSUING OFFICE IS PROHIBITED. Copy No.

LOCKHEED-CALIFORNIA COMPANY		ENGINEERING STUDY <input type="checkbox"/>		LAC 22-48						
DATE 28 July 1964		AFFECTS: WSP0 <input type="checkbox"/>		PROJECT <input checked="" type="checkbox"/>						
NAME OF MAJOR COMPONENT INLET CONTROL		PART OR LOWEST SUBASSEMBLY		PART NO. & MODEL OR TYPE						
TITLE OF PROPOSAL: RETROFIT PRODUCTION ADP INLET CONTROL SYSTEMS INTO FOUR AIRCRAFT.										
<p>NATURE OF PROPOSAL:</p> <p>This BCP covers the retrofit of four production ADP Inlet Control Systems into A-12 Aircraft. The following aircraft would be converted: S/N 127, 128, 130 and 132. S/N 130 presently has the Prototype ADP Inlet Control; this system will be used for spares to support S/N 129 and 131. The Ham. Std. Systems in S/N 127, 128 and 132 will be used as spares to support the remaining Aircraft using the Ham. Std. Inlet Control. Schedule for job completion based upon immediate go-ahead is one in Nov. 1964, one in Dec. 1964 and two in Jan. 1965.</p> <p>This BCP does not include the replacement of the APX-46 with a smaller ICF unit.</p>										
<p>REASON FOR PROPOSAL:</p> <ol style="list-style-type: none"> ADP Inlet Control measures α and β separately allowing for greater flexibility in providing proper spike position. Ham. Std. Inlet Control has experienced difficulty in maintaining spike stability. ADP Inlet Control allows for easy change of spike position schedule. Installing the ADP Inlet Control in four aircraft will improve our spares position to support the aircraft using Ham. Std. and Prototype ADP Inlet Control Systems. 										
ES		ESTIMATED COST AND TIME INVOLVED:								
		ADDITIONAL FUNDING REQUIRED:								
CP		ESTIMATED COST FOR KITS OR PARTS: Budgetary Target Price								
		ADDITIONAL FUNDING REQUIRED: Budgetary Ceiling Price								
ITEMS AFFECTED BY PROPOSAL:										
SAFETY	MISSION EFFEC-TIVENESS	PERFORM-ANCE	OPERATING PROCEDURE	INTER-CHANGE-ABILITY	WEIGHT OR WEIGHT & BALANCE	TOOLS & SUPPORT EQUIPMENT	MAINTENANCE PROCEDURE	SERVICE LIFE	FLIGHT MANUAL	MAINTENANCE MANUAL
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
EST. MAN/HRS. REQ'D. TO ACCOMPLISH CHANGE IN FIELD										
SOURCE OF PARTS FOR KIT Service Bulletin to be Written				AVAILABILITY _____ WEEKS AFTER APPROVAL						
DISPOSITION OF SPARES AFFECTED				SEE ABOVE						
INITIATED BY: LMG				APPROVED: PROJECT						

STATINTL

STATINTL

STATINTL

Approved For Release 2001/06/09 : CIA-RDP69B00279R000100110001-2

Approved For Release 2001/06/09 : CIA-RDP69B00279R000100110001-2

LOCKHEED-CALIFORNIA COMPANY		ENGINEERING STUDY <input type="checkbox"/>		10001-2							
		CHANGE PROPOSAL <input checked="" type="checkbox"/>		LAC 22-32							
DATE 25 July 1964		AFFECTS: WSP0 <input type="checkbox"/>		PROJECT <input checked="" type="checkbox"/>							
NAME OF MAJOR COMPONENT		PART OR LOWEST SUBASSEMBLY		PART NO. & MODEL OR TYPE							
TITLE OF PROPOSAL : IMPROVED FIRE WARNING SYSTEM											
NATURE OF PROPOSAL : Install new Fenwall Fire Warning System to replace Edison Temperature System. Fenwall System will be incorporated in all A-12 Articles. This will provide a reliable system with an expected 20,000 hours flight time per false warning.											
REASON FOR PROPOSAL : 1. The Fenwall Fire Warning Sensing Loop is sensitive to localized high temperature conditions. Edison system was based upon average temperature conditions. 2. Fenwall system is composed of two (2) sensing loops placed side by side. Both loops must indicate that a high nacelle temperature exists before the pilot is notified of a high temperature condition. 3. We are proceeding with this job. The ECP value indicated below does not include Spares and GSE of \$50,000 approximate value. Spares and GSE will be procured via Purchase Requests under CP-22 Call Section.											
ES	ESTIMATED COST AND TIME INVOLVED :										
	ADDITIONAL FUNDING REQUIRED :										
CP	ESTIMATED COST FOR KITS OR PARTS :										
	ADDITIONAL FUNDING REQUIRED : Budgetary Estimate ██████████ STATINTL										
ITEMS AFFECTED BY PROPOSAL :											
SAFETY	MISSION EFFEC. TIVENESS	PERFORM- ANCE	OPERATING PROCEDURE	INTER- CHANGE- ABILITY	WEIGHT OR WEIGHT & BALANCE	TOOLS & SUPPORT EQUIPMENT	MAINTENANCE PROCEDURE	SERVICE LIFE	FLIGHT MANUAL	MAINTENANCE MANUAL	
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
EST. MAN/HRS. REQ'D. TO ACCOMPLISH CHANGE IN FIELD											
SOURCE OF PARTS FOR KIT						AVAILABILITY _____ WEEKS AFTER APPROVAL					
SERVICE BULLETIN TO BE WRITTEN											
DISPOSITION OF SPARES AFFECTED											
WILL BE DETERMINED BY CUSTOMER DEPOT											
INITIATED BY :						APPROVED : ██████████ STATINTL					
LAC						PROJECT					

LOCKHEED - CALIFORNIA COMPANY		ENGINEERING STUDY <input type="checkbox"/>		LAC 22-31																							
		CHANGE PROPOSAL <input checked="" type="checkbox"/>																									
DATE 25 July 1964		AFFECTS: WSPO <input type="checkbox"/>		PROJECT <input checked="" type="checkbox"/>																							
NAME OF MAJOR COMPONENT SR-3		PART OR LOWEST SUBASSEMBLY		PART NO. & MODEL OR TYPE																							
TITLE OF PROPOSAL: INSTALL IMPROVED GYRO REFERENCE HEADING SYSTEM																											
<p>NATURE OF PROPOSAL:</p> <p>This ECP covers the entire cost of installation of the General Electric SR-3 Reference System to replace the MA-1 and MD-1 Reference System. The components of the SR-3 can be located in the same positions used for the MA-1/MD-1 System. Engineering and installation involved are relatively small jobs. SR-3 System would be incorporated in all A-12 Articles. Flight testing of the SR-3 System will be accomplished under Contract JET-P50.</p>																											
<p>REASON FOR PROPOSAL:</p> <p>MA-1 and MD-1 Reference Heading System is used as a back-up for the INS; This system has a total drift rate of approximately four (4) degrees per hour. The SR-3 system has a total drift rate of one (1) degree per hour. In addition, the SR-3 system is lighter and occupies less space.</p> <p>Use of the SR-3 system should provide the program with a highly reliable method of carrying out a mission if the INS fails during the flight.</p> <p>The ECP value indicated below does not include Spares and GSE of \$100,000 approximate Value. Spares and GSE will be procured via Purchase Requests under CT-22 Call Section.</p>																											
ES	ESTIMATED COST AND TIME INVOLVED:																										
	ADDITIONAL FUNDING REQUIRED:																										
CP	ESTIMATED COST FOR KITS OR PARTS:																										
	ADDITIONAL FUNDING REQUIRED:																										
<p>ITEMS AFFECTED BY PROPOSAL:</p> <table border="1"> <thead> <tr> <th>SAFETY</th> <th>MISSION EFFEC- TIVENESS</th> <th>PERFORM- ANCE</th> <th>OPERATING PROCEDURE</th> <th>INTER- CHANGE- ABILITY</th> <th>WEIGHT OR WEIGHT & BALANCE</th> <th>TOOLS & SUPPORT EQUIPMENT</th> <th>MAINTE- NANCE PROCEDURE</th> <th>SERVICE LIFE</th> <th>FLIGHT MANUAL</th> <th>MAINTE- NANCE MANUAL</th> </tr> </thead> <tbody> <tr> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> </tbody> </table>						SAFETY	MISSION EFFEC- TIVENESS	PERFORM- ANCE	OPERATING PROCEDURE	INTER- CHANGE- ABILITY	WEIGHT OR WEIGHT & BALANCE	TOOLS & SUPPORT EQUIPMENT	MAINTE- NANCE PROCEDURE	SERVICE LIFE	FLIGHT MANUAL	MAINTE- NANCE MANUAL	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SAFETY	MISSION EFFEC- TIVENESS	PERFORM- ANCE	OPERATING PROCEDURE	INTER- CHANGE- ABILITY	WEIGHT OR WEIGHT & BALANCE	TOOLS & SUPPORT EQUIPMENT	MAINTE- NANCE PROCEDURE	SERVICE LIFE	FLIGHT MANUAL	MAINTE- NANCE MANUAL																	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																	
EST. MAN/HRS. REQ'D. TO ACCOMPLISH CHANGE IN FIELD																											
SOURCE OF PARTS FOR KIT			AVAILABILITY _____ WEEKS AFTER APPROVAL																								
SERVICE BULLETIN TO BE WRITTEN																											
DISPOSITION OF SPARES AFFECTED																											
MA-1 AND MD-1 COMPONENTS WOULD BE SENT TO THE DEPOT. STATINTL																											
INITIATED BY:			APPROVED:																								
LAC			PROJECT																								

CLASSIFIED MESSAGE

S E C R E T

DATE 2241Z 24 JUN 64

ROUTING

2	<i>DH</i>	10
3		11
4	<i>CD</i>	12
5	<i>BFB</i>	13
6	<i>SD</i>	14
7	<i>RB</i>	15
8		16

TO : DIRECTOR

25X1A

FROM : [REDACTED]

ACTION:

INFO : OSA 1-15 *cl*

PRIORITY

TOR 2310Z 24 JUN 64

IN-84990

25X1A

TO PRIORITY [REDACTED]

INFO

CITE [REDACTED]

25X1A

OXCART

25X1A

REF [REDACTED]

25X1A

FOR J. PARANGOSKY FROM [REDACTED]

25X1A

1. OUR CURRENT BUDGETARY ESTIMATE TO RETROFIT THE ELEVEN HAMILTON-STANDARD EQUIPPED A-12 ARTICLES IS [REDACTED] THIS INCLUDES MINIMUM ENGINEERING AND TOOLING NECESSARY TO BACKFIT THE ADP R-12 PRODUCTION CONFIGURATION INLET CONTROL INTO THE A-12, PLUS PROCUREMENT OF EQUIPMENT AND ARTICLE MOD COST.

25X1A

2. IN ADDITION, SPARES AND GSE ON THE ORDER OF [REDACTED] TO

25X1A

[REDACTED] SHOULD BE CONSIDERED TO SUPPORT THE MODIFIED ARTICLES.

25X1A

3. TO PARTIALLY OFFSET THIS COST THERE IS A POTENTIAL REDUCTION IN THE CONTINUING R & D AND MOD EFFORT BY HAM-STD TO PROVE AND/OR FIX THEIR SYSTEM (AND ADP SUPPORT OF THIS EFFORT) AND SOME REDUCTION IN SPARES, O & R, AND TECH REP COVERAGE. THIS IS DIFFICULT TO ESTIMATE BUT A DECISION TO RETROFIT AS OF 1 JULY MIGHT RESULT IN REDUCED EXPENDITURES BY HAM-SID IN THE AREA OF [REDACTED] DURING THE BALANCE OF THE YEAR. HAM-STD APPEARS HEADED FOR AN OVERRUN AGAINST THEIR CALENDAR 1964 BUDGET. THIS PROGRAM WILL NEGATE THIS

S E C R E T

GROUP 1
Excluded from automatic
downgrading and
declassification

25X1A

IN-84996

S E C R E T

PAGE-2

POTENTIAL OVERRUN.

4. BASED ON OUR ABILITY TO ACCELERATE PRODUCTION SCHEDULES FOR R-12 HARDWARE CURRENTLY ON ORDER AT OUR MAJOR VENDORS, WE WOULD PLAN TO DIVERT ALTERNATE SETS OF THE A-12 PROGRAM AND AIM TO COMPLETE THE FIRST CONVERSION, PROBABLY 121, BY OCTOBER. ALL RETROFITS COULD NOT BE COMPLETED BEFORE NEXT SPRING.

5. THE ADP COMPUTER MUST INSTALL IN THE SPACE NOW OCCUPIED BY THE APX-46 IFF. NO OTHER EQUIVALENT SPACE REMAINS IN THE A-12 FOR IFF UNLESS A SMALLER SYSTEM CAN BE FOUND. WE ARE NOW INVESTIGATING THIS. COST OF A NEW IFF IS NOT INCLUDED IN PARAGRAPH 1.

END OF MESSAGE

S E C R E T